What Your Vote Means to Railroads ... p. 42

October 17, 1960

RAILWAY AGE *weekly*

Signal Convention

Automation, the effect of mergers spark three-day Chicago session

Santa Fe Installs New Car Icing Machines

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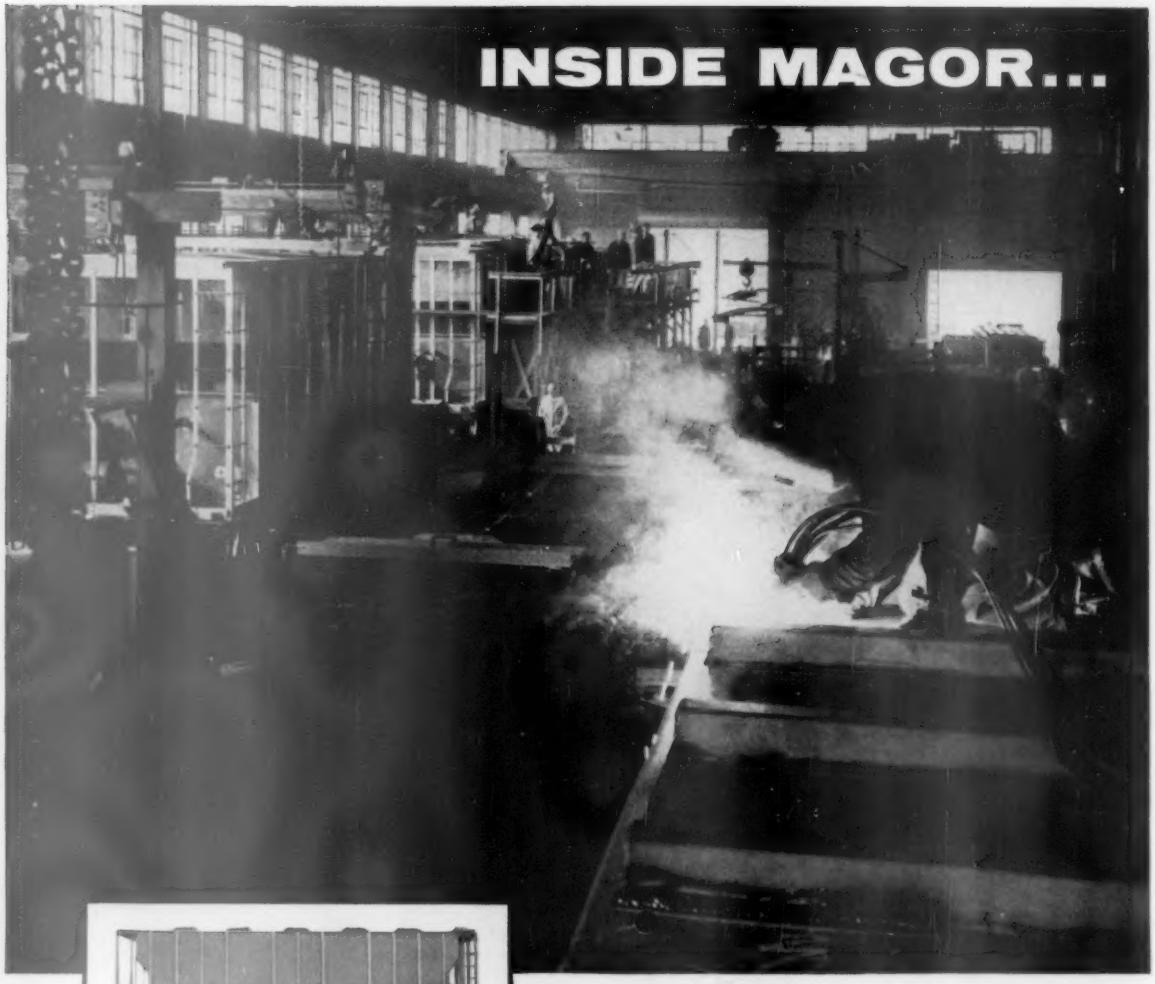

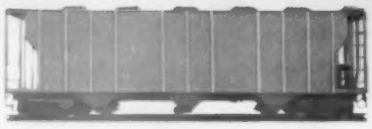

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RAILWAY AGE *weekly* October 17, 1960 • Vol. 149, No. 16

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Fourth morning coast-to-coast ..... p. 9

Santa Fe will start hauling containers next month on an expedited Chicago - Los Angeles schedule that will make possible delivery in Los Angeles fourth morning out of New York. Santa Fe says trailers can also be handled "if there is a demand."

Rail transit: What's ahead? p.18

Here's one transit consultant's answer, based on a broad background of passenger transportation experience and close familiarity with urban and suburban transit planning.

Cover Story—Santa Fe installs new icing machines p.28

The capacity of the road's car icing facilities at Belen, N.M. has been almost tripled. Now, up to 360 cars can be handled simultaneously there. The improvement is keyed to recent speed-ups in the road's eastbound freight schedules.

Court won't halt merger p.36

A Federal District Judge in Detroit refused to issue an injunction to prevent consummation of Erie-Lackawanna merger, granting instead a temporary restraining order to prevent the consolidated company from changing the status of employees until a three-judge court can decide the labor suit against the merger.

The Action Page—How're you voting? p.42

Railroad management people have not been disenfranchised.

AUTOMATIC RAILROADS

Railroad transportation, it has been said, lends itself ideally to automation. That is because railroad vehicles run on a track and are under centralized control. The railroads, and railroad equipment manufacturers, have been working diligently to apply the results of electronic research to the railroad industry. This issue contains three stories indicating that the possibility of complete railroad automation comes closer every day:

Rail automation: Here, now p.13

Radio controls switcher p.25

New York City has an automatic train p.26

ONE DOOR STANDS OUT

YOUNGSTOWN LIFT DOORS
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YOUNGSTOWN SLIDING FLUSH DOORS
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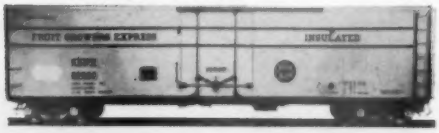

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Week at a Glance CONT

Current Statistics

Operating revenues	
7 mos., 1960	$5,647,350,460
7 mos., 1959	5,846,964,866
Operating expenses	
7 mos., 1960	4,468,305,006
7 mos., 1959	4,562,546,451
Taxes	
7 mos., 1960	616,918,640
7 mos., 1959	632,589,611
Net railway operating income	
7 mos., 1960	354,373,380
7 mos., 1959	462,418,217
Net income estimated	
7 mos., 1960	248,000,000
7 mos., 1959	339,000,000
Carloading revenue freight	
39 wks., 1960	23,278,671
39 wks., 1959	23,418,064
Freight cars on order	
Sept. 1, 1960	23,866
Sept. 1, 1959	37,172
Freight cars delivered	
8 mos., 1960	39,419
8 mos., 1959	27,435

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Short and Significant

End of passenger service . . .

on the Pennsylvania-Reading Seashore Lines is sought in a petition filed last week with New Jersey's PUC. The road had earlier refused to sign contracts with New Jersey's Division of Railroad Transportation under which the state is seeking to keep "essential" suburban service operating. A 1959 passenger loss of over $3 million is too big to be overcome by the proposed $277,000 payment under the state program, the road said.

Rapid transit in metropolitan areas . . .

according to last week's annual meeting of American Transit Association, promises to involve a growing number of railroads. "Rapid Atlanta," a plan for 21 miles of rapid transit on existing railroad rights-of-way in the Georgia city, would cost $59 million and is claimed to be "economically feasible" by 1970; Philadelphia has budgeted $7.2 million in 1961-1965 period as loan fund for purchase of cars to be used in city-aided commuter operations on Pennsylvania and Reading.

Increase of $5 million in net income . . .

for Class I railroads is estimated by the AAR for August net compared with August 1959. The estimate put the August net at $30 million compared with August 1959's $25 million. For this year's first eight months, however, the estimated income was off $86 million from last year — $277 million compared to $363 million. Thirty Class I roads failed to earn their fixed charges in this year's first eight months. Rate of return for the twelve months ended with August averaged 2.35%.

Wabash, Frisco and C&EI . . .

will tell the ICC that Illinois Terminal Railroad's abandonment proceedings are "not in the public interest." It is seeking to drop service on 42.5 miles of main line in Illinois and acquire trackage rights over the Illinois Central between Decatur and Champaign.

New-automobile shipment . . .

is going to be put back on the rails, Ford Motor Company's E. D. Dahill declared firmly recently. Mr. Dahill, supervisor of rates and classifications, sees a probable decline in straight TOFC movement of new cars—but at the same time there'll be a steadily growing demand for service utilizing tri- and bi-level equipment. At least six companies are now manufacturing removable racks or fixed-installation superstructures.

NEW DIOL® RD 79 CRANKCASE OIL HELPS RUN DIESEL ENGINES CLEANER LONGER

See for yourself how clean-running new Diol RD 79 oil is! This piston, from an Electro-Motive diesel in a heavy-duty freight locomotive, has run 200,000 miles without overhaul using new Diol RD 79.

DIOL RD 79 is the latest development in the exceptional line of Diol diesel crankcase oils. It runs even cleaner than Diol RD 77 and 78 oils. The 200,000-mile piston above showed deposits on oil rings as little as half those of pistons run 100,000 miles in similar tests using a reference heavy-duty oil of higher than average quality.

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Fourth Morning Coast-to-Coast

► The Story at a Glance: "Fast freight" will take on a new meaning next month, when Santa Fe starts hauling containers on a Chicago-Los Angeles schedule that approaches streamliner timing. Inauguration of premium piggyback service on Santa Fe's No. 7 —a mail-and-express train—will give fourth-morning Los Angeles delivery for shipments originating in New York, third-morning delivery for freight coming from Chicago. New York Central will handle the New York-Chicago service on its westbound Super-Van train.

For the shipper who puts a premium on speed—and is willing to pay a premium for speed—Santa Fe's new westbound schedule breakthrough may be the answer. Beginning about mid-November, the road will be offering the fastest freight service yet from Chicago to Los Angeles and, in combination with NYC Super-Van, from New York to Los Angeles.

It'll be a premium Plan IV service. The rate to be charged west of Chicago will be $1,600 per car, applicable to all freight and with a 60,000-pound maximum. Weight in excess of 60,000 pounds will be rated at $2.67 per hundredweight, with an overall maximum of 80,000 pounds. A regular Plan IV rate of $924 per car will be charged for the return move in freight service. Santa Fe is instituting the service on a six-month experimental basis.

Containers originating in the East will move into Chicago via New York Central Super-Van, which leaves New York at 12:30 a.m. and is scheduled into Chicago at 10 p.m. same day. NYC will make delivery to Santa Fe's passenger yard in Chicago.

The schedule for No. 7 calls for 11:55 p.m. departure from Chicago, 7:30 p.m. arrival at Los Angeles on the second day out. Overall, the New York-Los Angeles elapsed time will be about 71½ hours—compared to 57 hours, 15 minutes, for a passenger traveling "Twentieth Century Limited" and "Chief."

Initially, Santa Fe said, the service will involve container movements, but "there is no reason why regular trailers could not be handled if there is a demand for it." The road also indicated that no current consideration is being given to offering the expedited service to intermediate points, pending results of the 6-month experimental period on the Chicago-Los Angeles run.

Third-morning delivery from Chicago will give Santa Fe one day faster service than current expedited freight schedules offer. Fastest freight service now offered for traffic originating at Chicago, the road noted, provides for arrival in Los Angeles third evening for fourth morning delivery—on approximately a 60-hour schedule.

Competitive roads west of Chicago had little immediate comment on Santa Fe's move. Their general attitude: wait and see. In the past, however, shorter schedules placed in effect by one road have led consistently to competitive schedules by other carriers.

Since early 1958, when western lines cut westbound schedules to provide fifth-morning delivery on the West Coast, the story of freight service in the West has been largely one of steady improvement in scheduling. By late 1958, further schedule cuts made fourth-morning delivery the rule.

Principal customer of the new expedited service is expected to be U.S. Freight, headed by Morris Forgash—who less than two years ago forecast operation of piggyback service coast-to-coast on a 48-hour schedule within five to ten years (RA, Dec. 15, 1958, p. 52).

In a speech in Detroit on Oct. 10, Mr. Forgash described the new service to the Motor City Traffic Club in this way:

"We are coming closer to the day of the 48-hour coast-to-coast piggyback schedule which I predicted two years ago. . . At the outset, this service will be maintained experimentally for six months . . . We can, within the next two years, look forward to solid piggyback and containerized trains flashing between all the principal trading centers of the United States, beginning with transcontinental movements."

Authority to Control Sought in South and West

Illinois Central has filed formal application with the ICC for authority to purchase Atlantic Coast Line's 33.7% stock interest in Louisville & Nashville. Southern Pacific is seeking Commission approval for a proposed acquisition of control of Western Pacific.

IC had asked previously that the Commission require Coast Line to divest itself of L&N control—and to sell its interest to IC—as a condition for approval of the proposed ACL-SAL merger. Southern has entered a similar request in its own behalf.

Illinois Central said it has "no contract or agreement with the Atlantic Coast Line pursuant to which the proposed transaction might be effected." The control application, IC added, was filed in anticipation of a divestiture condition being imposed by the ICC when it acts on the ACL-SAL merger case.

SP indicated that a subsidiary, Southern Pacific Land Co., has acquired for investment 182,300 shares of WP common. If the ICC approves the SP application, Southern Pacific Co. would acquire control of WP through an exchange of stock on a share-for-share basis or through purchase of WP common. Southern Pacific would also take over WP stock now held by SP Land Co.

Both IC and SP cited significant benefits — elimination of duplicate facilities, improvement in coordination of services — which could be gained through their control of L&N and WP, respectively.

Referee Upholds Falsehood Discharge

Management has won an apparently significant victory before the Adjustment Board, with a referee's refusal to order reinstatement of a switchman who was discharged on grounds he had falsified his employment application more than two years previously.

Key factor in the case was the express provision on the application form that "false statement by applicant will be sufficient cause to justify termination of employment at any future time, if falsification is determined." Labor members of the First Division protested vigorously (to the extent of a 29-page dissent) that a contract provision setting a 30-day probationary employment period should rule—i.e., that if the carrier didn't discover a falsification within that time, it couldn't thereafter discharge the employee for falsifying his application.

The award noted that the claimant called attention to "numerous awards holding that time limits in agreements are to be adhered to strictly. But it is significant that none has specific reference to a falsification of an application form, while on the other hand, numerous awards . . . have been based on various theories as to why such is fatal to the claims therein."

The carrier (Belt Railway of Chicago) charged that the switchman's application erred in two respects: That he omitted mention of a previous work experience; and that he indicated no prior injuries. Actually, the record later showed, the employee suffered two shoulder dislocations, had a third one while working for the employer he didn't mention in the BRC application and then had two more identical injuries while working for the Belt.

The NRAB award found that "the pertinency and materiality of the misrepresentation is a particularly significant feature. . . . Claimant not only failed to reveal that he had had three anterior shoulder separations (dislocations) of the same shoulder, but by not revealing his former employment with Barrett (Division of Allied Chemical Co.), frustrated ready revelation of these injuries. . ."

The award noted, in addition, that the carrier used the procedure of notice and hearing (as set up in the BRT agreement) in handling the case, "whether it actually needed to or not."

Watching Washington *with Walter Taft*

• **THE ICC WILL DECIDE** this week whether or not to suspend, in whole or in part, the general rate increases proposed by the railroads in the Ex Parte 223 case. The Commission's decision will come after oral argument, which will be held in Washington Oct. 18.

TARIFFS publishing the increase now have Oct. 24 as their effective date, but numerous shipper protests against specific phases of the proposed hike have been filed. If the Commission has misgivings about individual items, it could, of course, suspend them and allow the tariffs' remaining items to become effective on schedule. Or it could ask the railroads for a short voluntary postponement of the whole increase, as it has done in similar cases of the past.

THE RAILROAD PRESENTATION in support of the proposed increases includes a warning that suspension of the tariffs would impose "irreparable injury" on the carriers. It argues, too, that, because the railroads are now suffering badly from inadequate revenues, a suspension would be "a severe blow to the public interest in adequate and efficient transportation service." Each day of suspension would bring a revenue loss of $400,000, the presentation also says.

PROTECTION FOR SHIPPERS is afforded by refund provisions of the tariffs. These stipulate that, if any increases resulting from application of the tariffs exceed increases subsequently approved by the Commission, the carriers will refund the differences. They also offer refunds of full amounts in cases where the Commission refuses to approve any part of proposed increases.

• **RADIO COMMUNICATION** in connection with train operation is coming in for special attention from a new committee of the Railway Labor Executives' Association. R. C. Coutts, president of the American Train Dispatchers Association, is chairman of the committee.

RLEA CHAIRMAN G. E. LEIGHTY says the committee will be concerned with safety and craft-jurisdiction phases of this development in train communication. He also says that dispatchers are supposed to be in charge of train movements, but that railroad officers sometimes direct movements by radiophone.

NO ACCIDENT of recent years was caused by such "interference" with usual dispatching procedures. Mr. Leighty admits that, but he recalls a head-end collision of nine years ago which is precisely in point.

THAT COLLISION, involving Louisiana & Arkansas trains, occurred Aug. 10, 1951, near Lettsworth, La. Out of the ICC's investigation came evidence indicating that a trainmaster, riding one of the trains, had been using radio in a rules-breaking undertaking to expedite movement of that train over the single-track line involved.

THE COMMISSION RECOMMENDED that the L&A discontinue the practice "of arranging unauthorized train movements by use of the train communication system." The recommendation did not condemn use of the train radio for dispatching. It did suggest, however, that if train radio is to be used for that purpose, such use should not be on a play-by-ear basis—it must be bottomed on formal arrangements and rules like those of dispatching systems which use telegraph and telephone communications.

Truckers Favor Repeal Of Agricultural Exemptions

Elimination of agricultural commodity exemptions now available to truckers has been recommended by the Middlewest Shipper-Motor Carrier Conference. A motion passed at that group's annual meeting in St. Paul, Minn., favors legislation that would repeal the agricultural exemption provisions of the Interstate Commerce Act.

The conference, representing shippers and truckers in the 11-state area served by the Mid-West Motor Freight Bureau, declined to go on record as opposing a bill that would permit railroads the same freedom from regulation now enjoyed by for-hire truckers of agricultural commodities. After hearing arguments that the exemption provisions of the Act had been "abused" and that truckers "were not dealing directly with farmers," the motor carrier group voted to ask for complete repeal of the exemption provisions.

Legislation has been introduced in the House of Representatives proposing either repeal of the agricultural commodity exemptions or extending them to railroads.

EMD Progress Report Begins Tour in Maine

EMD's fifth Progress Report—featuring displays and presentations on the latest developments in motive power and locomotive components—began its 1960 tour at Bangor, Me., on Sept. 19.

Victor E. Rennix, general sales manager, Electro-Motive Division of General Motors, said that this year's Progress Report will be shown to 152 railroads during a six-month, 21,000-mile tour touching 47 cities across the country.

Highlighting design and engineering changes in locomotive truck, traction motor and 567C engine components, the Progress Report details stories on

- Double coil truck springs;
- Traction motor gear case improvements;
- Traction motor support bearings;
- Constant pressure brush holders;
- Centrifugal spark arrestor manifolds;
- Improved fuel filtration systems;
- Needle valve injectors;
- Parts packaging improvements.

In October the display will be seen in Reading, Scranton, Sayre and Pittsburgh, Pa., Cleveland, Detroit, Chicago and Milwaukee.

The tour will continue through March 1961, covering the South, Southwest and West Coast cities. Final showing will be at Duluth, Minn.

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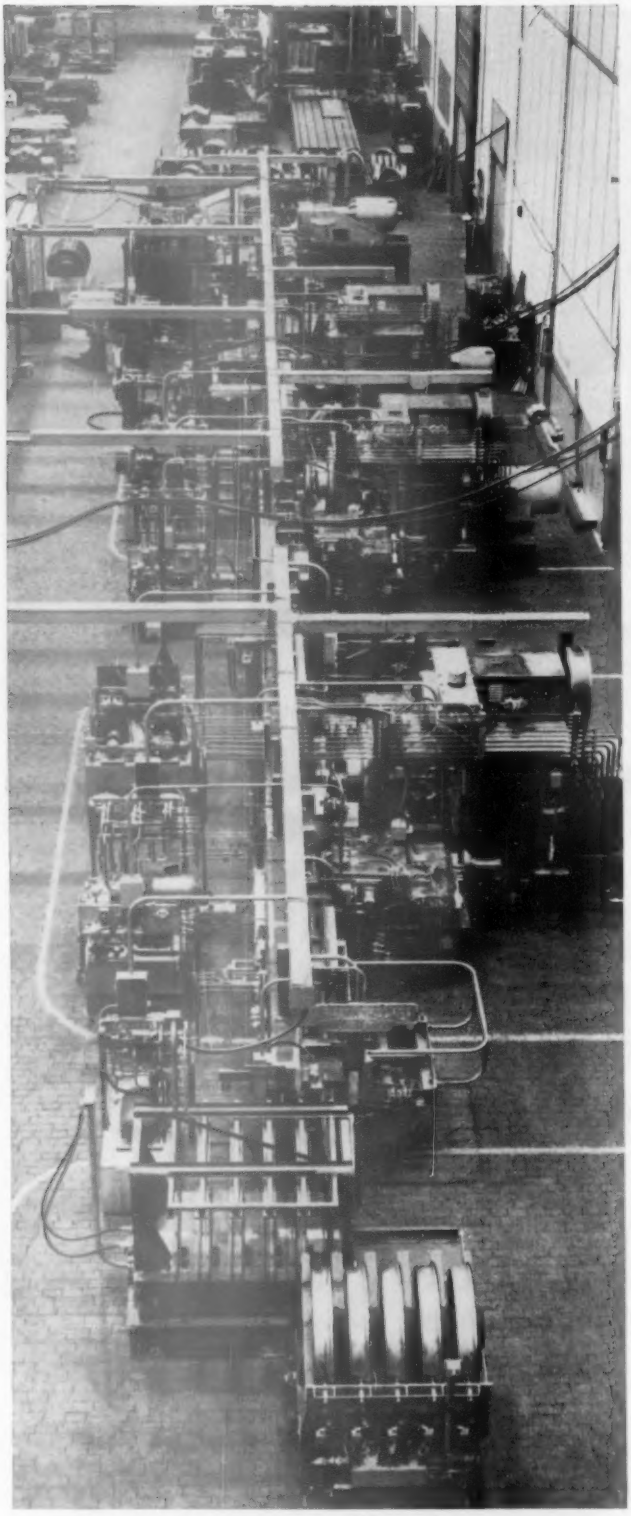

CAR-WHEEL MACHINING REVOLUTIONIZED... AT STANDARD

Railroad car wheels are now being completely machined in 75 seconds per wheel at Standard Steel Works—one of the leading producers of wrought steel wheels for every type of rail rolling stock. The new automatic wheel-line equipment recently installed at Standard is not only setting a world's record for machining speed—it is also producing finished wheels of extreme dimensional accuracy.

Designed and installed by Kearney & Trecker Corp., of Milwaukee, Standard's new wheel-machining line is unique in that wheels are handled vertically throughout the operation, rolling from station to station. Consequently, each wheel helps itself move from the loading station through all of the processing stations of the 118-ft. wheel-line. Contact Standard today for the most dependable wheel quality and delivery.

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Rail Automation: Here, Now

► The Story at a Glance: Recent tests indicated that automatic operation of trains is feasible. Descriptions and movies of two such tests—conducted by the Canadian National and the New York City Transit Authority—were presented to signal engineers in Chicago last week.

Another highlight of the Signal Section, AAR convention was a discussion of the key role—because of increased traffic over reduced trackage—of signaling in an era of mergers.

Tests of automatic train operation on the Canadian National this summer were the forerunner for automatically operated ore trains on the Carol Lake Railway. Here's how it came about. In July 1959 a meeting instigated by the Hanna Mining Co. was attended by representatives of interested railroads, General Motors Diesel Ltd., and General Railway Signal Co. As Franklin George, assistant to vice-president, GRS, put it before the Signal officers, a committee was charged with the task of producing specifications to cover application of automatic train operation to the 40-mile Carol Lake Railway.

Carol Lake branches off the QNS&L at MP 224. Automation is to be applied to 125-car ore trains of about 11,000 net short tons and powered by four 1,750-hp diesel locomotives.

After preliminary meetings, the Air Brake division of Westinghouse Air Brake Co. was invited to participate in the project.

Each of the three companies built its own "package." The Canadian National cooperated by making a 1,750-hp diesel available, which was modified as required. This locomotive was first tested at the shop and on yard tracks at the GMD works, London, Ont. For test purposes, no wayside equipment was installed. Instead, the desired codes were generated by equipment carried on the locomotive, and applied inductively to the locomotive receivers of the control sensing equipment. GRS provided wayside grade and slow-order markers comprised of inert tuned coils, Mr. George told the Signal Section.

CNR made available ten miles of main track near London, Mr. George continued, and provided a train, a crew, and necessary running rights as required. Tests of automatic operation of a diesel-powered freight train began early this past summer.

An exhausting test program was set up, Mr. George said, simulating all conceivable operating conditions. The terrain of the line where the tests were conducted had enough grade at one point to provide reasonable grade operating conditions, both ascending and descending. The test train had 35 cars with a gross tonnage of about 2,000 tons, approximating the tonnage rating of this locomotive in anticipated service.

"Our testing was concluded by making runs on a section of track having a one per cent descending grade for 9 miles. For these runs, the equipped locomotive was MU-coupled to another, standard diesel-electric locomotive. No special connections of any kind were required in the coupling," said Mr. George. "We had for one run a train of about 6,600 tons comprised of 76 cars. The equipped locomotive was in control and it automatically handled the train to everyone's satisfaction, including down the grade where both air and dynamic braking were required."

Mr. George also described the NYCTA automated subway train operation. A demonstration of this train and how it runs automatically was held last week in New York for transit officers (see page 26).

Mr. George referred to a CNR Research Department report of early 1959, on how train operation might be automated. These major conclusions were reached, he said:

- Continuous, not intermittent, control would be required.
- Radio or lineside induction control would not provide the degree of protection required.
- Track circuits would provide continuous train control and could be integrated with supervisory control of CTC.
- The system should be able to provide situation "reports."
- Directing of trains from a central brain would be preferable, eliminating duplication of equipment on many locomotives.
- The only locomotive "intelligence" required would be that to properly interpret controls received, and self-check train and locomotive conditions. With proper signaling, conventional trains can be operated over the line, interpersed with automatic trains if desired.

As for remote control of motive power, Mr. George said that GRS developed a remote-controlled, battery-operated mine locomotive in 1957. The controls provided were forward, reverse and stop. One of these locomotives, though not in use, is at NYC's Elkhart, Ind., retarder yard. Another railroad is using a similar mine-type locomotive for trimming operations at a retarder classification yard.

In 1958, a remote-controlled diesel locomotive also employing inductive carrier control, was developed, tested and placed in service on the QNS&L. Its work there is of a repetitive nature, hauling loads of gravel to a dumper, then returning the same cars empty to the shovel. This remote control system included controls for the pneumatic dumping of the cars. Mr. George added.

A second speaker discussed what he said might be called the "era of railroad mergers." This era will result in elimination of duplicate facilities and lines in many mergers, said I. W. King, transportation engineer, Union Switch & Signal Division, WAB Co. This elimination will naturally increase traffic volume on primary lines, he continued, adding: "In many cases it will be possible to handle the traffic over the primary lines of merged properties by a single main track with centralized traffic control."

In many mergers, Mr. King said, "routes that parallel the selected primary routes may be abandoned completely, with resultant savings in maintenance, taxes and operating expenses. In other cases, sufficient traffic and online industries will require the continuation of parallel routes, but it will be possible to tailor these lines downward to meet the requirements of lighter traffic. This will often permit the abandonment of second main tracks and justify the installation of centralized traffic control on the remaining single track."

Mr. King then cited merger examples showing the role played by signaling. In the case of the Norfolk & Western and the Virginian, by the N&W utilizing certain segments of VGN tracks, the merged road can haul over 70% more coal tonnage with the same number of locomotives than over the former N&W tracks alone.

A specific example: by operating eastward tonnage trains over the VGN single track main between Kellysville and Roanoke, with its 0.6% ruling grade, a 7-mile helper district of 1.0% gradient on the N&W line between Walton and Christiansburg is avoided, and helper service eliminated. Accordingly connections have been built between these lines at Kellysville and Roanoke to permit routing of tonnage

(Continued on page 16)

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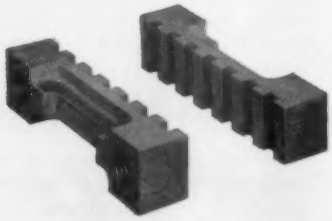

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YES, Magnus is in the railroad bearing business—has been almost from the days of the Tom Thumb! And during this century of specialized service, Magnus has pioneered many significant advances in bearing metallurgy and design—to provide better bearing performance at lowest possible cost.

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RAIL AUTOMATION: HERE, NOW *(Continued from page 13)*

trains over the most efficient line. CTC is being installed on the single track VGN line between these points, and second main track between Kellysville and Walton on the N&W will be eliminated as a result of CTC.

Concerning the Erie-Lackawanna merger, Mr. King said that "all through freight and passenger trains will now be routed over the low grade Erie line between Hornell and Buffalo, where existing light-traffic CTC is being expanded and improved to efficiently handle the concentrated traffic volume. The parallel Lackawanna double track line between Buffalo and Corning, approximately 125 miles, will be reduced to single track for freight service only.

"A new modern, electronic classification yard, which neither road could justify independently, will be built at East Buffalo to handle the combined traffic of the merged roads," Mr. King added. "Also, the increased tonnage moving through Hornell will require adding 11 tracks to the existing fast freight yard at that point."

A third speaker talked about regulation. Further revisions in the Interstate Commerce Commission's Rules, Standards and Instructions might well be in order in light of carriers' applications for relief, and the recent advances in technological improvements in railway signaling, according to Everett Hutchinson, ICC commissioner. Commissioner Hutchinson said: "It has occurred to me that perhaps regulation has not entirely kept pace with developments in this era of electronics and automation. It has been ten years since our rules have been revised, and I have wondered if further revisions are not now in order to make them key with new developments in the art and to insure that the Commission is doing all it can in this connection to assist the railroads, not only to promote safety, which is the prime consideration but to increase operating efficiency."

Concerning Section 136.410 of the Commission's RS&I, which requires that electric locks be installed on hand-throw switches in traffic control territory where train speeds exceed 20 mph, Mr. Hutchinson said, "the Commission [by 1955] had become aware that perhaps rigid enforcement of [this Section] was having the undesirable effect of retarding the installation of traffic control . . . and concluded that some measure of relief was justified." Since that time the Commission has granted relief of two kinds: (1) permitting the applicant to install mechanical time locks in lieu of electric locks; and (2) relief from electrically locking hand operated switches at those industrial sidings where trains are not permitted to clear the main track.

Since this type of relief had been granted, in so many cases, after hearing, where the applicant made an adequate showing that safety of operation would not be impaired by the absence of electric locks, Mr. Hutchinson said, "the Commission has issued a Notice of Proposed Rule Making stating that it has under consideration revision of Section 136.410 . . . so as not to require the installation of an electric lock on any hand-operated switch in traffic control territory where trains are not permitted to clear the main track at such switch and to permit the use of a mechanical time lock on a hand-operated switch in traffic control territory." Oral hearings on this matter were to be held last week, the Commissioner said.

Railroading After Hours with Jim Lyne

WORKING RULES ASSESSED—That "Manpower Utilization in the Railroad Industry" pamphlet—that I've mentioned here a couple of times—turns out to be more and more informative, the more I read it. The author is Morris A. Horowitz of the Bureau of Business & Economic Research, Northeastern University, Boston.

The author by no means accepts general condemnation of the working rules—a lot of them he finds justified, at least in principle. While not passing judgment on all the working rules, he does go into the major classes of them—and reveals his conclusions as to the justice or injustice of many of them.

WHAT'S A FEATHERBED?—The author defines as featherbedding "those working rules resulting in extra compensation for no extra work or for work not performed."

Pay for deadheading, or for being held away from home terminal, he would not consider to be either featherbedding or "make work." On the other hand, he quotes the late Professor Sumner Slichter as of the opinion that the dual basis of pay in road service has been "converted into a make-work rule" by failure to give effect to technological progress in increased train speed.

SOME REAL HANDICAPS—Working rules that the author finds particularly damaging include those which do not count overtime payments in calculating monthly wage guarantees—so that an employee may receive the guaranty payments even though his total compensation is well above the guaranteed minimum. The rigid rule limiting interdivisional runs (which, if permitted, would give railroads a chance to get full mileage of 100 or 150 miles for each "day" paid for) strikes the author as economically injurious.

He doesn't think much, either, of strict rules on switching done by road crews—"when a road employee receives a full day's pay at yard rates for switching incidental to his road work, this amounts to featherbedding."

Strict craft jurisdiction in shop work he does not find in accordance with the "rule of reason" and is, accordingly, "make work." The author doesn't think very highly of some of the "full crew" laws either—nor of the arguments for firemen on freight and yard diesels.

COMPETITION WILL DECIDE—The booklet contains convenient tables showing relative "productivity" of railroad employees, and their hourly and annual compensation. To look at these opulent pay figures, one might suppose they were those from the country's richest industry—instead of the one at the bottom of the entire list of America's businesses.

I was talking the other day to a union officer whose members are bus drivers—and he told me their standard day is 160 miles. For truck drivers it is often higher than that. How are railroad employees, with their 100-mile day, going to compete with those fellows?

"CTC means greater efficiency"

says Mr. Arthur Jansen, Railroad Security Analyst, W. E. Burnet & Company, New York, N.Y.

Portrait by Editta Sherman

"Prompt operating savings in the railroad industry can be found in greater efficiency. With dieselization virtually completed, the most promising areas appear to lie in the installation of modern classification yards and Centralized Traffic Control."

Mr. Jansen made this statement because he believes that CTC is the *practical* way for railroads to expand operations while reducing their operating costs.

Roads with CTC and automatic classification yards have reported a 30 to 40% return on their investment. Contact Union Switch & Signal for the latest facts on traffic control and classification yard systems.

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Rail Transit: What's Ahead?

Urban transit is back in the news. Every city of size is having some kind of transportation crisis, and rail transit is receiving increasing mention as a practical solution. But in the studies which are coming out, non-rail transit is growing. In this situation, what does the steel wheel on the steel rail have to offer? What can the railway supply industry do to protect its markets? Can it make a significant contribution toward the solution of urban and suburban transit problems?

For an answer to these questions, Railway Age sought out someone familiar with the problems of urban and suburban transit planning but with a broad background of passenger transportation experience. Here are the questions we asked John S. Gallagher, Jr. of the Planning Research Corp., and here's what we heard:

* * *

Q. What's ahead in the transit field, Mr. Gallagher? Is rail transit "the" answer to urban and suburban transit problems, as many are now saying?

A. Technologically, yes. But there are strong forces working against it; so much so that if rail transit is not actively promoted and merchandised it may well lose out in the many opportunities ahead. Railway suppliers have a golden opportunity on their doorstep not only to supply an active existing market, but to expand this market — and, further, to create new markets.

Q. What needs to be done that's not being done now?

A. I can think of two things: First, the industry has a bad public image, in large part stemming from years of poverty and decline, but also from the lack of spritely contemporary design. Rail transit is much "the same old thing" it was 20 or 30 years ago.

Second, the industry should be taking some positive steps to make available a supply of competent transit planners and technicians trained in the proper and economic use of rail transit. Right now there is a paucity of planners trained in rail transit in the face of an over-abundance trained in highway transportation. There is also an acute shortage of rail transit planning material, of practical value.

Q. Is there a genuine economic need for rail transit, do you think?

A. As our urban centers grow larger, and even begin to impinge on one another, the competition for land use increases—so the answer is definitely yes. Rail transit has one indisputable advantage: It can move the largest number of people with the least amount of land taken out of general use, and do it at the lowest total cost.

Q. Can you give me an example?

A. Take Boston's Central Artery Expressway. It cost the community $50 million to construct this mile of elevated highway in the heart of downtown Boston, and it required removing $16 million in property values from the tax rolls. Thus this modern highway is costing $1.7 million annually in interest charges, $1.1 million annually in depreciation, over $1 million in lost taxes, plus unknown expenses for maintenance, lighting and policing. Thus the total cost comes to more than $4 million annually. I mention this to show how a large portion of the cost of an urban highway is paid by the community, not by the passenger.

Q. And how is this highway working out?

A. At 2:00 p.m. on a Sunday afternoon, it's fine. But at 5:00 p.m. on a weekday

(Continued on page 20)

Estimated Urban and Suburban Transit Car Requirements—1960 to 1970

	Replacement Cars*	New Lines or Extensions
CHICAGO		
Chicago Transit Authority	300—450	0—500
Illinois Central	100—150	0—50
Chicago, South Shore & South Bend	50—75	0—25
Rehabilitated electric lines‡	100—150	
CLEVELAND		
Cleveland Transit System		0—80
Shaker Heights	25—40	0—25
BOSTON		
Metropolitan Transit Authority	150—230	0—50
New suburban lines¶		25—100
NEW YORK		
New York City Transit Authority	1890—2837	0—200
New York Central	150—300	
New Haven	200—450	
Long Island	150—400	
Staten Island Rapid Transit	25—45	0—30
Erie-Lackawanna	150—225	0—200†
Hudson & Manhattan	175—225	0—100
Pennsylvania	85—115	0—125†
PHILADELPHIA		
Philadelphia Transit Co.	200—350	0—75
Pennsylvania	125—220	
Reading	150—230	0—30
Proposed South Jersey Transit		50—400
Philadelphia Suburban Transp.	50—75	
TORONTO		
Toronto Transit Commission	0	100—280
	4075—6567	175—2270

NOTE: These figures include no allowance for non-electric suburban operations
* based on replacing three existing cars with two new cars
† these figures based on converting existing suburban operations to electrified operations
‡ allowing for possible revivals of CNS&M and CA&E
¶ proposed electrified suburban lines outside of MTA

New York Central's President Alfred E. Perlman says: "This new Big Four yard is going to save us 33% of its $11,000,000 cost every year. Modern equipment throughout is the key." Operating Vice President John F. Nash, left, points out features of one of the yard's 55 Racor mechanical car retarders, which are already returning 40% on their investment. • These remarkable retarders are low in price, economical to install, cost next to nothing to maintain. Could they save big money for your road? Consult American Brake Shoe Company, 530 Fifth Avenue, New York 36, N. Y. In Canada: Dominion Brake Shoe Company, Ltd. Remember: *Quality* products cut your ton-mile costs.

AMERICAN
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COMPANY

RAIL TRANSIT: WHAT'S AHEAD? *(Continued from page 18)*

evening, it moves very slowly. For all the money that was spent on its six lanes, during the peak hours it moves about 10,000 people an hour. Right nearby is a two-tracked MTA rail transit line which requires only one-third of the land, costs only one-fourth as much as the highway, and is capable of moving 40,000 people an hour, when there is need for that much peak-load capacity.

Boston is not unusual; the same conditions prevail in almost every large city. Boston is unusual to the extent it was possible to isolate the true cost of this highway segment. In most cities highway costs are usually obscured by being divided up among many budgets.

Q. Doesn't the full cost show up in bond issues?

A. Sometimes, but more often not. When it does, the results are startling. In San Francisco, for example, the public was given a chance to vote on comparable and competing highway and rail transit plans, though not at the same time or on the same ballot. The highway took a licking, and came back again for another. Transit was voted in. But most often, highway costs are divided up and apportioned around so that the voter rarely gets much of a chance at them.

Q. If this is so—and we all know it is—why have highways been so dominant?

A. One major reason is that highway transportation is constantly and aggressively merchandised by the automotive and highway supply industry. Pick up any popular magazine and look over the stories and ads, and you'll quickly get the point.

Q. Can't this be carried too far?

A. Yes, of course. Just as highways have been oversold, so can this method of promotion be overdone. But the proponents of rail transportation are seldom on hand in sufficient strength to capitalize on these situations when they arise.

Q. Aren't any rail suppliers active in this field?

A. True, some have been active, a few very active. But there is a limit to what a small number of individual suppliers can do by themselves. The significant point is that few suppliers who would benefit from a resurgent rail transit industry seem to have recognized the need for a sustained industry-wide campaign to educate the public on the many advantages of rail transit. What is needed is a consistent campaign, running for at least three years, and backed by trained planners and technicians to provide the carry-through.

Q. You mentioned the need for a new concept in rail transit. What do you have in mind?

A. All of us have grown accustomed to change and "progress" in our everyday surroundings. It is, unconsciously perhaps, one of the standards we use in measuring the varying merits of the things we buy. In comparison with most other consumer services—and particularly in comparison with highway transit — rail transit has been most conservative and least conscious of the effects and value of design. As a result the "rail transit" product being offered today is little different from what was being offered 25 years ago. There have been significant technological design improvements, but the public is hardly aware of them.

Monorail is a marvelous example of the point I am trying to make. Except in a very few special instances, monorail transit simply cannot be justified under rigorous economical or technical examination. But in spite of this fact, it is a public image which simply won't die; it really stirs the public imagination, and meets the desire for something more in keeping with the times. Because suspended monorail is nothing more than a standard railroad turned upside down, I can't see why ordinary right-side-up rail transit can't be made just as appealing. Incidentally, it's much cheaper and more practical right side up—and it will actually go faster.

Q. You have mentioned the need for better design several times. What's wrong with our present transit designs?

A. Essentially two things: The few remaining rail transit lines in operation have very little to offer in the way of eye or comfort appeal. They're immensely economic and practical, but essentially dull and drab. Unusually good design is needed to offset the constant cries about transit losses and service discontinuances, and the drab appearance of that which remains. Second, all attention is focused on heavy-duty transit of the kind needed in huge, high-density metropolitan complexes like Chicago, New York and Philadelphia. There's no question as to its efficiency in situations like this, but it is poorly suited for the development of transit needs in smaller cities. There are less than half-a-dozen really big cities that can afford the massive kind of transit systems that exist now. The real future for rail transit lies in the smaller cities which are too big to depend solely upon highways to serve all their transit needs yet not big enough to justify the heavy capital investment required by existing heavy-duty systems. There are many cities like St. Louis, Seattle, Atlanta, Kansas City, Miami, Denver, Portland, Ore., Pittsburgh, Washington, and the like, where lighter duty rail transit would fill a genuine need.

Q. Where do the rail transit equipment people come into the picture?

A. The real challenge is to design a system for smaller cities. And if they can come up with a practical, economic system for smaller cities they will also have something which will be most useful for lighter-duty assignments around the larger cities. This same situation spills over into the commuter problem. Here there is also need for lighter-duty rail suburban services for use where there is insufficient traffic density to support the present super-expensive kind of rail suburban service.

Q. You seem to have three markets here: one introducing rail transit and commutation services to cities which presently do not have it; another extending rail transit into lighter density areas around the largest metropolitan centers; and third, encouraging the development, modernization and expansion of existing rail transit and commutation systems.

A. That's right. Rail transit ought to be competing with highways and buses on a much broader front. But to do this, it needs a new concept of both light- and heavy-duty transit equipment.

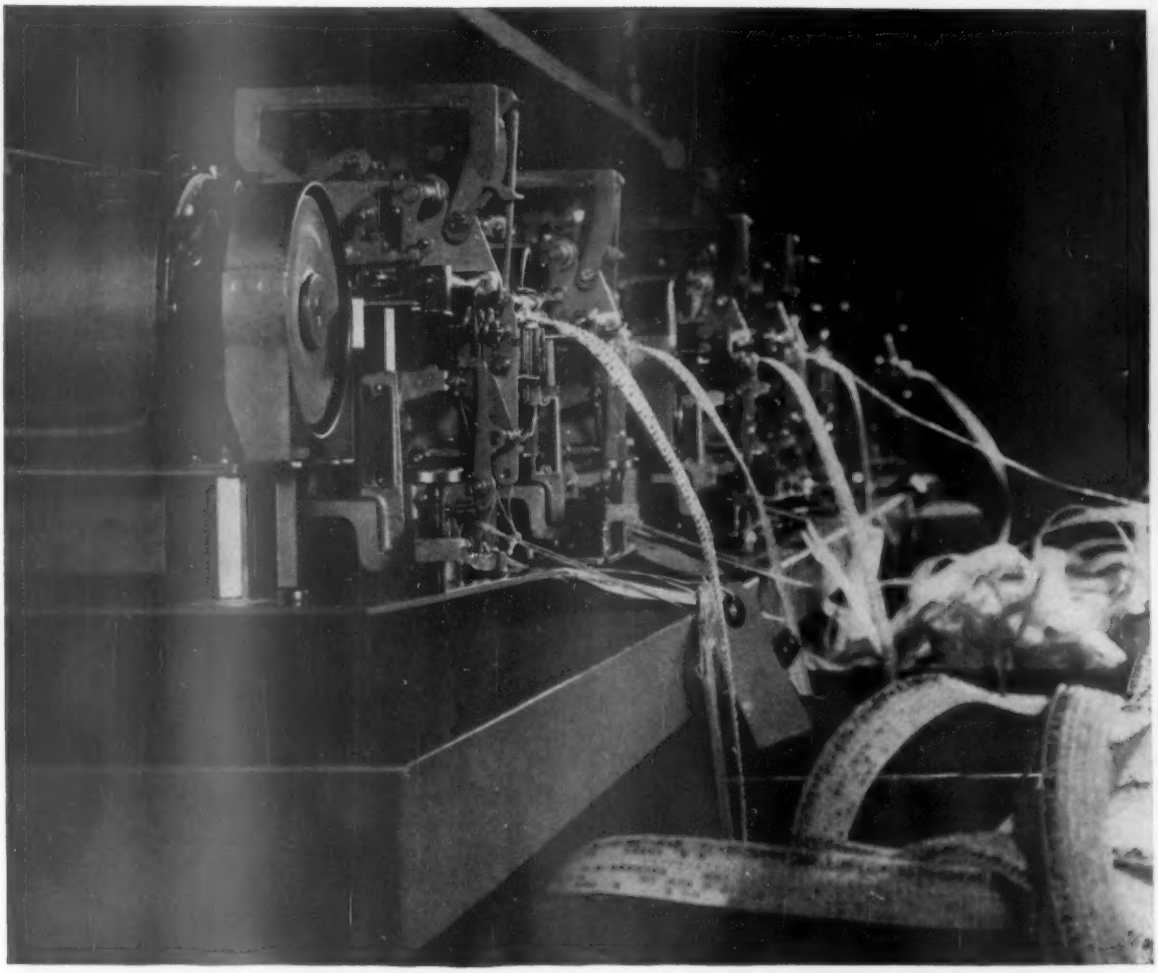
Q. What sort of design concepts do you have in mind?

A. I have in mind a system which can deliver a ride substantially faster than is presently possible by highway. Over in Japan, where land is very precious and must be used with great care, they are actually building a railroad designed for average passenger train speeds of 150 miles per hour. (RA, May 4, 1959, p. 36.) If this is possible—and it seems to be—why should an 80 to 100 mph transit line be so difficult? The vehicles should have eye and comfort appeal more in keeping with all the other things around us—it should make the passengers think of it as the modern way to travel. It should be designed so as to permit lower first cost; the average price per seat should be brought down from its present levels which are over double the cost of an equivalent bus.

Q. How would you do this?

A. Essentially by designing a vehicle which is less complicated; one which makes the maximum use of every component part. For example, the truck is the heaviest, most expensive single part of the car. Here is an area where more original thinking and active research is needed. Simplify the truck so as to make it easier to maintain, cheaper to

(Continued on page 38)



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Looking on during spectrographic oil tests at P.R.R. Testing Laboratory are (left) M. A. Pinney, Engineer of Tests, Pennsylvania Railroad, and C. D. Gilchrist, Gulf Sales Engineer. Thousands of tests like this, over a period of years, confirmed the acceptability of Gulf Dieselmotive 79 oil.

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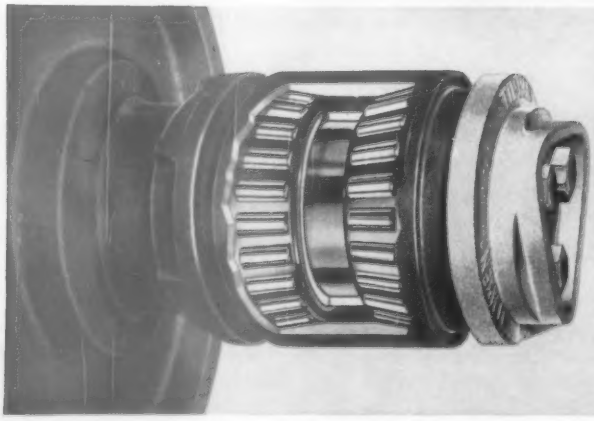
Laboratory tests show that Timken® "AP" bearings will go 4 years without adding lubricant. Now operating records of several railroads, under varying conditions, bear this out. For example, one railroad found ample lubricant remaining in test car Timken "AP" bearings after 288,000 car miles of high speed service—though none had been added to the original bearings during the test!

This railroad experience is proof that a four-year lubrication period with Timken "AP" bearings is safe—and an important source of economy.

Saving lubricant and the time it takes to add it is one of the important ways Timken bearings can help the railroads cut operating and maintenance costs and thereby increase the return on the investment for roller bearings. Railroads can take advantage of this saving by putting their Timken "AP" equipped cars on a four-year program, adding lubricant at the time of air-brake inspection.

97 railroad and other freight car owners now have well over 67,000 cars on Timken bearings in service or on order as they make the big switch to "Roller Freight", to cut operating costs and solve the hot box problem. Timken "AP" bearing equipped cars are averaging 214,000,000 car miles per car set out because of an overheated bearing. Timken "AP" Heavy Duty bearings are available for all standard axles—including 7 x 14 Class G—to meet any railroading need. Let us show you how Timken bearings can save for you. The Timken Roller Bearing Company, Canton 6, O. Cable: "TIMROSCO".



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▲
OPERATOR (above), holding hand-operated deadman switch, selects switches to move engine in normal switching service.

RADIO-CONTROLLED switching locomotive is now in actual use in GE's plant at Erie, Pa. The locomotive is shown as it was exhibited at Short Line Association annual meeting. ▶

Radio Controls GE Switcher

Radio control of an industrial switching locomotive is now an accomplished fact. This means that trains can be made up or switched by one man.

The new radio control system was demonstrated at the recent meeting of the American Short Line Railroad Association. It was developed by the General Electric Company's Locomotive and Car Equipment Department. GE sees the arrangement as being particularly adaptable for short-line switching operations.

Here's how the system works:

A portable 15-lb radio transmitter is carried by the locomotive operator. The transmitter makes it possible for him to start, stop, reverse, and speed or slow the locomotive from distances up to ¼ mile away. Along with controlling these operating functions remotely, the operator can also sound the horn and bell.

Only ten different signals are required from the radio transmitter to control the locomotive in normal switching service. These are: forward motion, reverse motion, increased speed, decreased speed, brakes on, brakes off, bell, horn, sanding, and uncoupling.

The locomotive also can be controlled by the operator in the conventional way, from the cab, when that is preferable. Cab equipment duplicates that which is standard on normal diesel-electric locomotives. In addition, the locomotive carries the radio receiver and control equipment which function to duplicate cab operation when remote control is used.

It could be possible, according to GE, for a stationary transmitter at a central location to control several locomotives.

The 15-lb radio transmitter for individual locomotive control can be carried on the shoulder of the operator. It is powered by a rechargeable battery. On its top are the ten switches for locomotive control. When the "deadman" switch is compressed in the palm of the operator, the portable transmitter emits a continuous carrier signal which holds in the closed position a "fail safe" pilot relay in the locomotive receiver. If this deadman is released at any time, which removes the carrier signal, there is an emergency brake application and removal of power from the traction equipment. As the operator depresses the safety, or deadman, switch, the locomotive brakes release. Next, he presses the proper switch to determine the direction of operation and proceeds to control the unit with the other switches.

To place a locomotive in operation, the operator initially places the "remote-manual" switch in the locomotive cab in the "manual" position to start the diesel engine and allow it to warm up in the usual manner. The radio power switch is also put in "on" position to warm the receiving equipment. When transferring to remote control, the throttle is placed in idle, the reverser is placed in neutral, and the "remote-manual" switch is moved to the "remote" position. The locomotive brake handle is then moved to the "release" position, although the locomotive brakes remain applied through the emergency safety control and cannot be released until the operator has placed the remote transmitter in operation.

All of the radio and control equipment conforms to existing federal regulations governing operation and construction of this type of apparatus, according to GE. The builder is prepared to assist customers in obtaining all necessary clearances and allocations of frequency, power, and other governed aspects of the apparatus.

Demonstrations have been made with a 25-ton industrial diesel electric, but the system is applicable to other types of locomotives.

NEW YORK CITY TRANSIT AUTHORITY
AUTOMATION TRAIN TEST-TRACK & CODE SCHEME
(SEA BEACH LINE - TRACK E-4)
GRS EQUIP.
NEW UTRECHT AVE
DIRECTION OF TRAFFIC
USS EQUIP.
18TH AVE
RECEIVERS
75 CODE LOOP
GRS EQUIP.
INSTR. CAR
USS EQUIP.
75 CODE LOOP
RECEIVERS
0 CODE ZONE (BRAKE)
180 CODE (5 MPH) ZONE FED FROM NEW UTRECHT AVE
270 CODE ZONE (29 MPH) FED FROM WAYSIDE EQUIPMENT THROUGH RAILS
180 CODE (5 MPH) ZONE FED FROM 18th AVE.
0 CODE ZONE (BRAKE)
FINAL STOP ±5FT
FINAL STOP ±5FT

New York Has Automatic Train

► **The Story at a Glance: An automated train was demonstrated to transit officers last week by the New York City Transit Authority. The three-car train was designed as a rolling laboratory for automatic subway train operations. It has been operating for several months on BMT track in Brooklyn.**

Specifications, based on this train operation, are being prepared for the design and manufacture of equipment for automatic train operation on one track of the Grand Central Terminal-Times Square shuttle. Chairman Charles L. Patterson of the NYCTA says he expects the automatic subway train to be in operation this year.

The New York City Transit Authority last week gave transit officers a preview of automatic subway train operations. The Authority's three-car train was demonstrated for the first time to persons not directly connected with the project.

Brooklyn patrons of the Authority's Sea Beach line have seen the train in operation on 2,700 ft of BMT track between the New Utrecht Avenue and 18th Avenue stations. It is a forerunner of an automated subway train expected to be operating this year on one track of the Grand Central Terminal-Times Square shuttle line.

Train operation is completely automatic. The train is controlled by 100-cycle alternating current superimposed on the rails at varying code rates. Here's how a typical train run operates (see diagram) between New Utrecht and 18th Avenue stations. With the train in New Utrecht Avenue station, 270 code (270 pulses per minute of 100-cycle alternating current) is applied to the rails by Union Switch & Signal equipment at 18th Avenue. Receivers on the US&S-equipped lead car of the train pick up the code, which results in actuation of controls to start the train. It accelerates to 29 mph, and maintains this speed.

At a predetermined point in approach to the 18th Avenue station, the train passes an insulated joint onto rails carrying 180 code. Upon receipt of this code, the train is controlled to decelerate to 5 mph until it passes a second insulated joint in approach to the 18th Avenue station. At this point, the train moves into a 0 or no code zone and is brought to a stop by service brake application within ±5 ft of a specified stopping point. After the train comes to a stop, 75 code is fed into a wire loop laid between the rails. Receivers on the train pick up the code to actuate door controls for unlocking and opening the doors. The headlights change to tail lights, the tail lights to headlights. The destination sign rolls, changing from "Grand Central" to "Times Square."

Next, an automatic dispatching unit at 18th Avenue station reads a tape, iniating controls to remove the 75 code after the doors have been open for one minute. Removal of the code actuates controls for closing the doors and releasing the brakes. General Railway Signal equipment at New Utrecht Avenue station then applies 270 code to the rails, which feeds down to the train and is picked up by the receivers on the GRS-equipped car. The train accelerates to 29 mph and returns to New Utrecht Avenue station.

Now that initial tests are over, a reliability test is planned that will consist of continuous automatic operation of the test train for 24 hr daily for several days. Also, engineers must determine locations of code change points (insulated joints) to provide minimum running time between terminals. This will have to be determined for the Grand Central-Times Square shuttle track that will be equipped for automatic operation.

After completion of tests and all controls are working perfectly, this train is the one the NYCTA plans to put into operation on the northerly track of the Grand Central-Times Square shuttle. Before it goes into actual shuttle operation, the train will be equipped with a telephone system keeping it in constant voice contact with dispatchers at Times Square and Grand Central. When in actual service, a tape recording will warn passengers that the doors are about to close; and a visual sign, with the same warning, will flash on.

All of the equipment is of the "fail-safe" type, says Mr. Patterson. In case anything abnormal develops while the train is moving, (e.g., excessive speed), a compensating device will get it back to normal; in the unlikely event that the adjusting mechanism doesn't work, the train will cease taking power and stop.

A "catch-up" will maintain a meticulous schedule. That is, if a passenger holds the door for 10 seconds at Grand Central, the "catch-up" device will correspondingly decrease the length of the next stop at Time Square and bring it back to schedule.

Numerous electric "scanning" devices are employed. A broken rail, or some such track condition, will simply detain the automatic train at its terminal. Any abnormal brake condition will do the same.

A new RIBBONRAIL Service—an entirely new approach to the best-known, most dependable rail welding system known today—designed to increase your production and cut rail welding costs. Watch for the announcement.

OXWELD RAILROAD DEPARTMENT

Linde UNION CARBIDE

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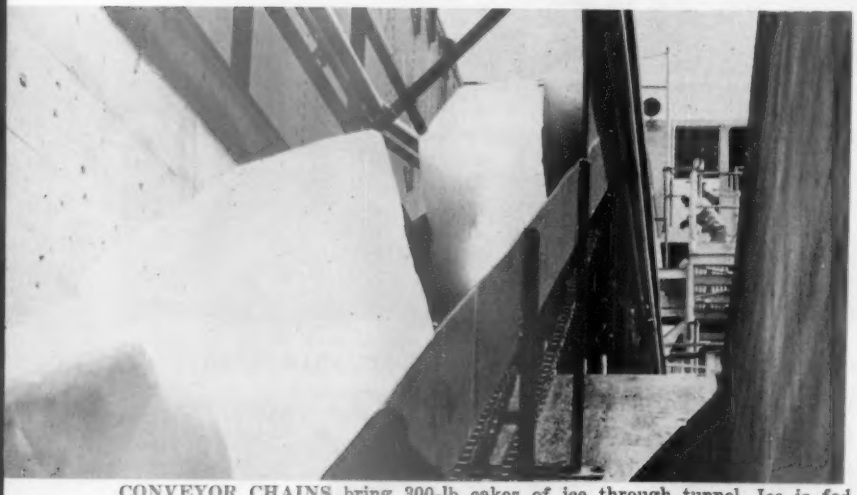
Santa Fe Installs New Car Icing



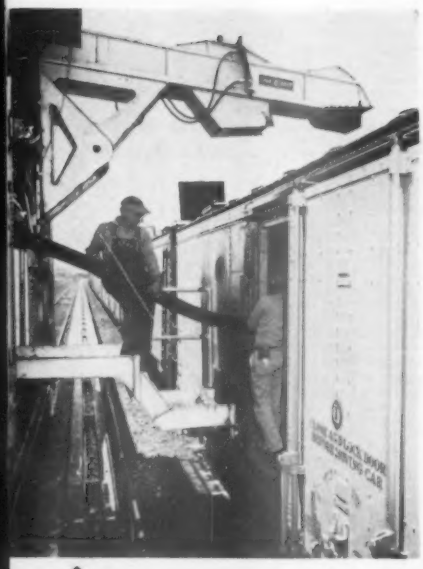
CONVEYOR CHAINS bring 300-lb cakes of ice through tunnel. Ice is fed along conveyor and up the ramps to the icing machines.

Santa Fe has almost tripled the capacity of its car icing facilities at Belen, N.M.

The improvement is keyed to recent speed-ups in the road's eastbound freight schedules.

Two docks—one all new, one an expansion of an existing dock—can now handle up to 360 cars simultaneously. Icing machines, built by Link-Belt Company and installed at the new dock for this year's peak perishable movement, will load two and one-half tons of ice per minute in bunkers; top icing takes about three minutes per car. Crews recently had an 88-car train completely iced and ready to go in slightly more than an hour.

Up to 19,000 tons of ice can be stored in two storage rooms located between the docks. Storage facilities are used primarily during the peak



TOP ICING of commodities such as lettuce, carrots, celery and peas, takes about three minutes per car.

TWO STORAGE ROOMS, with 19,000-ton capacity, service icing docks. Ice moves to new dock through a 250-ft tunnel.

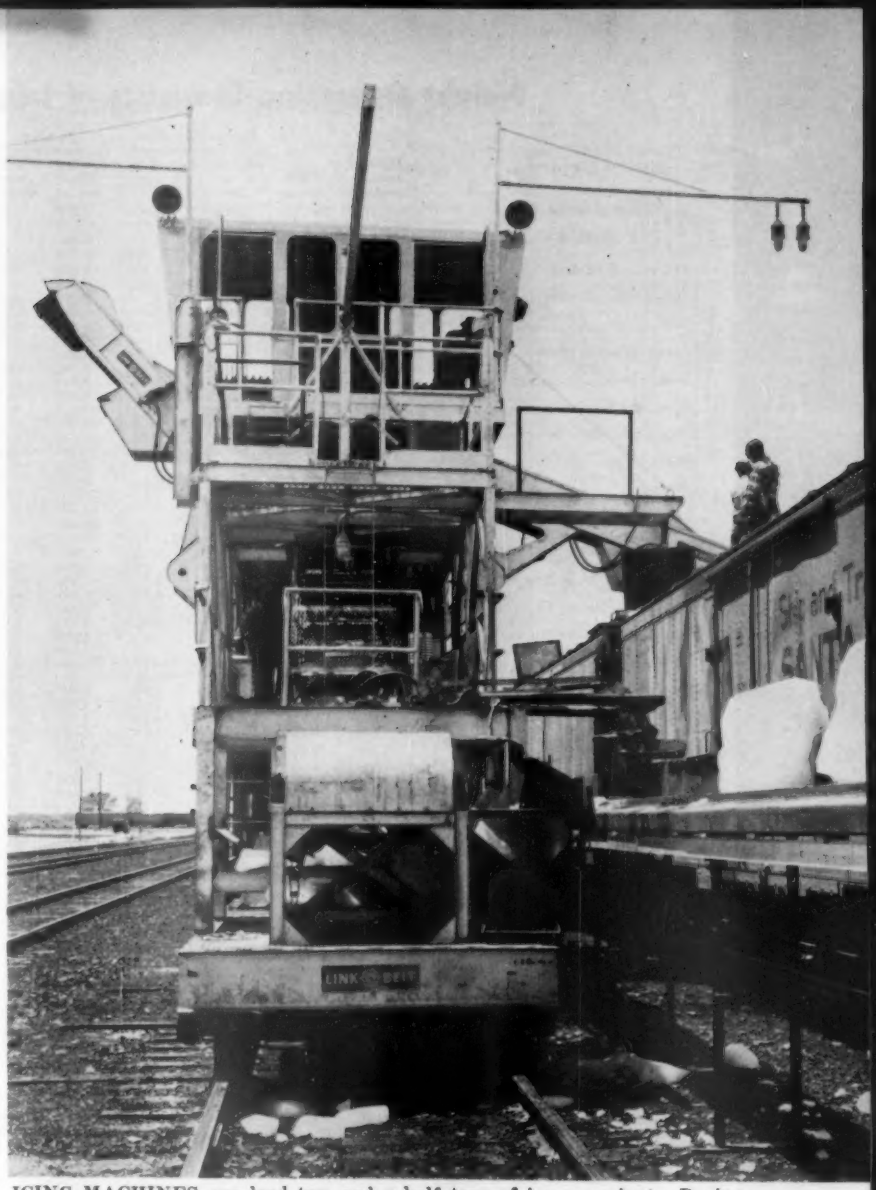
Machines

summer season, when daily deliveries average about 1,000 tons over a 45-day period—but top peak days may see as much as 1,800 tons delivered from storage.

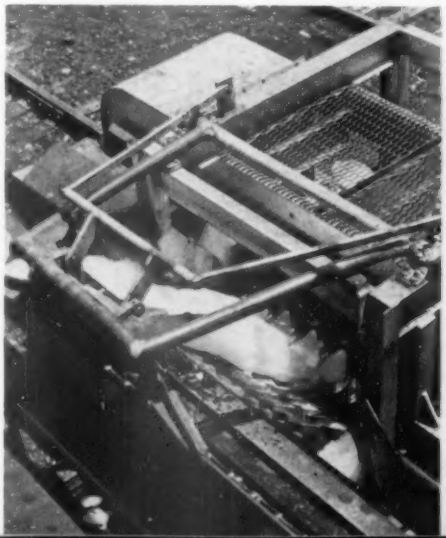
Ice moves to the new dock through a 250-ft tunnel and is then fed along a conveyor and up ramps to the two icing machines. From the supply ramps, the cakes move to a crusher and then through a trough to the car bunker. Icing machine operators have an unobstructed view of the trough.

Ice may also be crushed to snow-like consistency and blown into cars for top icing.

Belen formerly operated with a single two-track, 130-car-capacity dock. Santa Fe enlarged this facility to handle 180 cars and built the new two-track, 180-car dock parallel to the older installation.



ICING MACHINES can load two and a half tons of ice per minute. During summer icing crews work around the clock. Belen formerly had a single two-track 130-car-capacity dock. The revamped facility can now handle up to 360 cars at a time.



CRUSHERS size the ice for loading in bunkers, or break it down to snow-like consistency for top icing of perishables. On one recent occasion, crews iced an 88-car train and had it ready to go in little more than one hour.

Freight Operating Statistics of Large Railroads—Selected Items

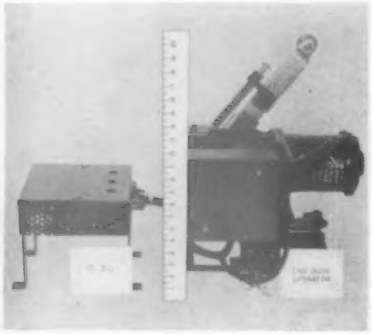
Region	Road and Year	Miles of road operated	Locomotive Miles: Train miles	Locomotive Miles: Principal and helper	Locomotive Miles: Light	Car Miles: Loaded (thousands)	Car Miles: Per cent loaded	Ton-miles (thousands): Gross excl.locos & tenders	Ton-miles (thousands): Net rev. and non-rev	Road-locos. on lines: Serviceable: Unstored	Road-locos. on lines: Serviceable: Stored	Road-locos. on lines: B.O.	Road-locos. on lines: Per cent B.O.
New Eng. Region	Boston & Maine	1960 1,549	208,151	208,511	2,616	7,240	59.3	526,698	209,876	79	2	12	12.9
		1959 1,559	214,797	215,129	3,870	7,859	61.6	551,667	221,033	74	1	27	26.5
	N. Y., N. H. & Hartfd	1960 1,739	250,842	251,380	14,950	8,899	60.9	608,968	239,430	65	..	12	15.6
		1959 1,739	250,066	250,066	17,890	10,310	65.0	685,752	286,734	66	..	15	18.5
Great Lakes Region	Delaware & Hudson	1960 763	155,642	156,687	1,470	7,286	62.8	525,953	258,662	33	2	6	14.6
		1959 764	154,979	156,642	1,933	7,673	66.7	537,428	273,864	34	..	6	15.0
	Del., Lack. & Western	1960 941	220,277	226,403	10,711	9,255	63.4	636,076	272,006	56	..	7	11.1
		1959 918	220,017	225,991	11,817	10,005	65.4	692,797	294,667	58	..	3	4.9
	Erie	1960 2,239	509,398	511,252	11,033	26,187	66.1	1,724,791	673,051	165	2	7	4.0
		1959 2,199	558,530	561,040	14,596	28,840	65.0	1,920,283	749,995	174	..	1	.6
	Grand Trunk Western	1960 951	200,744	200,748	1,090	6,671	57.7	477,921	182,557	41	..	2	4.7
		1959 951	218,322	218,896	1,376	6,979	58.4	508,232	195,300	51	9	23	27.7
	Lehigh Valley	1960 1,114	178,292	179,865	3,451	7,710	64.0	537,642	241,416	31	..	3	8.8
		1959 1,114	185,843	188,086	3,975	8,257	66.6	562,265	258,637	28	..	6	17.6
	New York Central	1960 10,326	1,980,603	1,992,377	86,920	79,625	56.2	6,433,590	2,680,382	440	12	60	11.7
		1959 10,387	2,020,042	2,031,403	91,966	86,463	58.4	6,790,790	2,921,979	432	..	53	10.9
	New York, Chic. & St. L.	1960 2,155	600,958	600,958	4,862	26,012	60.7	1,977,026	850,147	101	29	11	7.8
		1959 2,155	601,407	601,407	4,606	27,661	64.5	2,011,295	898,541	101	30	7	5.1
	Pitts. & Lake Erie	1960 220	45,682	45,682	....	2,086	61.9	205,590	124,662	15	..	2	11.8
		1959 221	59,115	59,115	....	2,740	66.1	252,190	126,075	14	..	3	17.6
	Wabash	1960 2,400	388,182	388,432	3,693	18,367	61.2	1,322,940	532,207	111	..	4	3.5
		1959 2,379	494,659	494,977	3,994	21,321	62.5	1,490,796	589,582	114	..	..	..
Central Eastern Region	Baltimore & Ohio	1960 5,793	1,280,413	1,360,776	87,233	53,490	58.8	4,488,806	2,150,710	359	40	40	9.1
		1959 5,802	1,325,459	1,431,543	112,926	59,565	60.5	4,784,987	2,370,814	379	60	26	5.6
	Bessemer & Lake Erie	1960 203	49,844	51,552	135	2,066	60.6	246,044	159,677	13	..	..	..
		1959 203	67,870	72,294	216	3,491	62.0	405,836	263,491	16	..	..	..
	Central RR Co. of New Jersey	1960 593	105,846	107,060	5,372	3,958	62.9	318,102	169,487	63	3	..	..
		1959 597	116,138	117,530	6,116	4,345	64.4	339,393	182,579	60	..	5	7.7
	Chicago & Eastern Ill.	1960 863	99,947	99,947	2,033	5,247	59.7	429,601	215,845	27	..	5	15.6
		1959 863	110,178	110,178	2,019	5,457	63.7	423,045	214,809	25	..	5	16.7
	Elgin, Joliet & Eastern	1960 205	52,345	52,487	....	1,775	58.6	153,403	82,708	41	3	4	8.3
		1959 205	68,179	69,315	....	2,446	61.3	203,947	109,726	44	..	..	..
	Pennsylvania System	1960 9,809	2,572,040	2,711,359	166,954	107,750	60.7	8,416,722	3,919,454	699	1	69	9.0
		1959 9,865	2,764,236	2,900,807	180,363	118,953	64.4	8,997,724	4,330,835	738	..	70	8.7
	Reading	1960 1,302	264,461	265,284	7,660	9,996	58.1	875,816	458,438	126	8	26	16.3
		1959 1,302	301,109	302,668	9,355	11,291	62.3	960,272	518,628	152	4	17	9.8
	Western Maryland	1960 841	134,101	138,138	6,819	5,857	62.7	530,728	301,318	41	..	2	4.7
		1959 844	148,679	155,024	8,655	6,455	64.7	570,077	326,547	36	..	1	2.7
Pocahontas Region	Chesapeake & Ohio	1960 5,060	1,167,881	1,169,000	20,626	53,868	56.0	4,953,468	2,612,970	586	..	43	6.8
		1959 5,061	1,159,885	1,163,007	21,091	56,711	56.8	5,047,940	2,838,822	580	10	39	6.2
	Norfolk & Western*	1960 2,722	726,067	741,089	27,491	36,853	54.2	3,777,467	2,000,178	165	4	9	5.1
		1959 2,724	730,405	754,366	35,250	38,631	57.4	3,786,663	2,110,112	201	34	23	8.9
	Rich., Fred. & Potomac	1960 110	39,681	39,681	849	2,584	61.2	178,855	70,631	15	..	..	..
		1959 110	38,093	38,093	799	2,372	66.8	153,844	62,204	14	..	1	6.7
Southern Region	Atlantic Coast Line	1960 5,563	673,245	673,245	6,970	24,527	57.0	1,900,804	854,044	119	13	2	1.5
		1959 5,602	650,127	650,127	6,509	23,390	58.0	1,802,875	819,919	126	..	1	.8
	Central of Georgia	1960 1,712	176,339	176,339	2,088	6,807	61.8	533,098	258,323	34	..	1	2.9
		1959 1,712	190,682	190,682	1,903	7,316	64.4	560,304	273,946	35	..	1	2.8
	Florida East Coast	1960 572	70,685	70,685	....	2,763	55.7	214,990	80,215	45	6	8	13.6
		1959 572	88,744	88,744	50	2,700	53.6	219,212	81,313	49	1	4	7.4
	Gulf, Mobile & Ohio	1960 2,717	252,810	252,810	....	13,277	63.4	972,542	453,449	80	..	11	12.1
		1959 2,717	256,171	256,171	207	13,933	67.2	985,079	473,571	85	..	6	6.6
	Illinois Central	1960 6,500	944,505	944,505	24,965	41,164	59.3	3,098,680	1,404,827	179	6	62	26.1
		1959 6,439	979,438	979,438	26,738	43,261	62.6	3,176,508	1,490,252	187	27	162	43.1
	Louisville & Nashville	1960 5,666	921,564	922,049	15,209	34,974	59.5	2,810,278	1,375,417	167	..	2	1.2
		1959 5,679	872,045	872,739	14,351	34,797	61.8	2,696,678	1,351,053	161	..	8	4.7
	Seaboard Air Line	1960 4,133	594,708	594,708	2,735	23,438	56.3	1,875,861	839,293	118	..	6	4.8
		1959 4,135	592,435	592,435	2,509	22,581	59.3	1,761,525	799,524	134	..	5	3.6
	Southern	1960 6,242	837,108	837,228	8,821	37,250	61.9	2,700,697	1,101,420	200	4	4	1.9
		1959 6,243	830,762	830,918	8,884	38,885	64.7	2,707,851	1,275,161	197	1	3	1.5
Northwestern Region	Chicago & North Western	1960 9,244	827,587	827,587	9,941	32,362	59.7	2,449,644	997,273	183	..	15	7.6
		1959 9,251	890,780	890,780	9,411	35,470	61.5	2,561,985	1,210,533	170	..	9	5.0
	Chicago Great Western	1960 1,437	134,219	134,219	241	6,669	63.4	497,297	234,411	25	..	2	7.4
		1959 1,437	135,218	135,218	188	6,994	66.7	494,163	231,809	25	..	2	7.4
	Chic., Milw., St. P. & Pac.	1960 10,590	775,366	781,896	8,523	34,610	62.9	2,520,266	1,118,621	155	18	2	1.1
		1959 10,583	861,334	870,311	13,134	41,253	65.2	2,881,663	1,318,514	318	8	10	3.0
	Duluth, Missabe & Iron Range	1960 575	124,935	125,236	373	6,726	50.5	730,347	441,682	68	29	1	1.0
		1959 557	139,026	139,347	707	7,644	51.0	852,548	506,304	67	17	4	4.5
	Great Northern	1960 8,300	892,702	896,737	24,687	39,391	63.7	3,035,989	1,490,664	288	5	4	1.3
		1959 8,281	961,247	968,738	21,876	42,797	62.9	3,288,988	1,596,207	270	..	11	3.9
	Minn., St. P. & S. Ste. Marie	1960 4,168	332,711	333,221	230	12,592	64.7	878,280	408,859	97	..	2	2.0
		1959 4,169	364,469	365,593	642	13,755	66.1	953,124	445,994	91	8	2	2.0
	Northern Pacific	1960 6,533	712,732	718,095	10,322	30,275	67.5	2,067,556	946,697	251	4	10	3.8
		1959 6,533	776,341	782,687	8,275	33,687	65.7	2,348,058	1,066,214	239	2	6	2.4
	Spokane, Portland & Seattle	1960 935	134,425	134,425	1,176	5,779	74.0	382,066	182,655	28	..	..	..
		1959 935	141,867	141,867	1,231	6,146	73.9	365,195	171,000	55	..	1	1.8
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1960 12,970	2,759,042	2,830,945	38,822	118,933	63.2	8,709,315	3,407,151	692	..	35	4.8
		1959 12,996	2,970,400	3,105,813	69,951	125,226	62.0	9,151,949	3,470,403	624	..	20	3.1
	Chic., Burl. & Quincy	1960 8,625	984,822	982,001	22,622	41,170	64.2	2,879,856	1,265,483	138	2	52	27.1
		1959 8,652	1,039,480	1,036,941	21,417	43,842	64.9	3,050,586	1,349,509	140	7	74	33.5
	Chic., Rock I. & Pac.	1960 7,525	1,035,001	1,037,808	1,494	40,203	59.7	3,041,004	1,224,217	202	..	4	1.9
		1959 7,508	1,114,316	1,114,120	2,710	43,872	62.8	3,163,639	1,325,780	190	..	6	3.1
	Denver & R. G. Western	1960 2,128	266,505	281,422	23,085	13,241	74.3	917,586	444,479	78	5	10	10.8
		1959 2,128	296,469	314,660	26,714	13,699	72.4	966,770	472,888	80	7	8	8.4
	Southern Pacific	1960 7,914	2,274,525	2,361,731	137,182	104,286	62.4	7,451,654	2,972,809	746	1	24	3.1
		1959 8,011	2,350,976	2,442,261	145,077	110,864	64.8	7,785,400	3,193,282	709	3	26	3.5
	Union Pacific	1960 9,747	1,840,888	1,861,977	43,612	88,903	64.0	6,057,321	2,478,913	332	46	73	16.2
		1959 9,743	2,137,373	2,155,972	49,876	99,968	66.8	6,673,069	2,850,460	334	19	99	21.9
	Western Pacific	1960 1,188	263,680	269,558	19,038	10,538	68.5	701,309	309,124	47	..	5	9.6
		1959 1,188	280,905	288,603	27,870	10,970	67.1	728,913	310,752	45	..	1	2.2
Southwestern Region	Kansas City Southern	1960 886	111,901	111,951	89	7,200	66.2	536,477	250,591	22	..	1	4.3
		1959 886	126,183	126,183	155	8,159	64.9	624,638	294,103	22	..	1	4.3
	Louisiana & Arkansas	1960 746	75,286	75,286	11	3,634	60.9	297,216	139,558	17	..	..	..
		1959 746	83,866	83,866	....	3,917	66.3	303,456	147,072	18	..	..	..
	Mo.-Kans.-Texas Lines	1960 2,915	250,457	250,457	2,308	12,004	65.9	867,848	393,701	72	..	1	1.4
		1959 2,916	215,909	215,909	2,107	11,785	67.2	864,117	397,257	61	..	4	6.2
	Missouri Pacific	1960 9,413	1,141,704	1,141,704	8,221	50,841	63.9	3,682,439	1,689,758	217	..	10	4.4
		1959 9,440	1,179,834	1,179,834	8,962	54,770	64.1	3,930,855	1,791,262	214	6	18	7.6
	St. Louis-San Francisco	1960 4,505	597,920	597,920	5,653	23,457	66.9	1,637,974	778,270	103	4	13	10.8
		1959 4,528	597,434	597,434	5,714	24,099	69.2	1,651,797	798,195	99	..	10	9.2
	St. Louis Southw. Lines	1960 1,554	313,990	313,990	3,743	14,977	71.3	968,619	432,986	50	..	1	2.0
		1959 1,554	353,687	353,687	4,418	16,205	69.9	1,056,392	472,222	50	..	1	2.0
	Texas & New Orleans	1960 4,078	561,173	561,173	30	26,736	66.1	1,904,980	884,841	139	..	1	.7
		1959 4,148	651,025	651,025	38	29,089	65.2	2,070,843	948,143	138	..	3	2.1
	Texas & Pacific	1960 1,819	274,329	274,329	2,507	12,913	61.7	972,284	366,299	36	..	2	5.3
		1959 1,822	291,663	291,663	2,726	13,554	62.4	1,001,146	385,776	37	..	2	5.1

For the Month of June 1960 Compared With June 1959

Region	Region, Road and Year	Freight cars on line: Home	Freight cars on line: Foreign	Freight cars on line: Total	Per Cent B.O.	G.t.m.per train-hr. excl.locos and tenders	G.t.m.per train-mi. excl.locos and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd car-mile	Net ton-mi. per car-day	Cars-miles per car-day	Net daily ton-mi. per road-mi.	Train-miles per train-hour	Miles per loco. per day
New Eng. Region	Boston & Maine 1960	2,292	7,342	9,634	3.9	39,487	2,535	1,010	29.0	712	41.5	4,516	15.2	84.1
	1959	1,991	8,027	10,018	3.3	40,650	2,573	1,031	28.1	738	42.6	4,726	15.8	77.5
	N. Y., N. H. & Hartfd. 1960	4,478	13,395	17,873	8.1	38,711	2,428	955	26.9	449	27.4	4,589	15.9	138.2
	1959	2,880	15,087	17,967	6.1	41,817	2,742	1,147	27.8	565	31.3	5,496	15.2	136.0
Great Lakes Region	Delaware & Hudson 1960	4,587	4,178	8,765	8.3	63,483	3,397	1,671	35.5	995	44.6	11,300	18.8	140.7
	1959	2,949	4,998	7,947	7.5	63,541	3,487	1,777	35.7	1,140	47.9	11,949	18.3	138.9
	Del., Lack. & Western 1960	5,402	7,937	13,339	12.3	53,227	3,014	1,250	29.4	686	36.8	9,635	17.9	141.8
	1959	5,477	9,238	14,715	10.6	54,671	3,204	1,363	29.5	681	35.3	10,700	17.4	145.5
	Erie 1960	11,260	13,950	25,210	12.3	70,764	3,418	1,334	25.7	926	54.5	10,020	20.9	110.9
	1959	9,934	16,017	25,951	6.6	71,383	3,470	1,355	26.0	956	56.6	11,369	20.8	122.4
	Grand Trunk Western 1960	5,972	6,448	12,420	7.4	56,895	2,385	911	27.4	489	31.0	6,399	23.9	166.1
	1959	5,194	8,284	13,478	7.1	51,477	2,337	898	28.0	490	30.0	6,845	22.1	102.7
	Lehigh Valley 1960	6,880	7,448	14,328	16.5	62,148	3,039	1,365	31.3	561	28.0	7,224	20.6	198.9
	1959	5,409	8,411	13,820	9.4	64,680	3,049	1,403	31.3	623	29.8	7,739	21.4	209.8
	New York Central 1960	59,432	69,488	128,920	10.2	58,635	3,285	1,368	33.7	686	36.3	8,653	18.1	154.0
	1959	57,310	74,973	132,283	7.1	58,470	3,398	1,462	33.8	725	36.7	9,377	17.4	170.4
	New York, Chic. & St. L. 1960	11,421	14,103	25,524	12.6	58,257	3,334	1,434	32.7	1,149	58.0	13,150	17.7	160.2
	1959	9,029	15,525	24,554	12.3	59,460	3,396	1,517	32.5	1,242	59.3	13,899	17.8	163.7
	Pitts. & Lake Erie 1960	7,737	4,862	12,599	11.7	69,222	4,510	2,735	59.8	329	8.9	18,888	15.4	90.7
	1959	4,021	7,595	11,616	6.5	65,812	4,282	2,141	46.0	360	11.8	19,016	15.4	132.2
	Wabash 1960	9,572	9,935	19,507	9.0	81,693	3,419	1,375	29.0	887	50.0	7,392	24.0	119.5
	1959	9,563	7,181	16,744	8.2	73,838	3,028	1,198	27.7	1,156	66.9	8,261	24.5	154.7
Central Eastern Region	Baltimore & Ohio 1960	61,637	30,001	91,638	18.4	56,853	3,557	1,704	40.2	780	33.0	12,375	16.2	113.1
	1959	56,383	30,307	86,690	18.4	56,580	3,672	1,819	39.8	877	36.4	13,621	15.7	114.6
	Bessemer & Lake Erie 1960	6,761	1,885	8,646	8.8	76,080	5,331	3,460	77.3	681	14.6	26,220	15.4	155.9
	1959	4,264	1,435	5,699	8.7	101,841	6,227	4,043	75.5	1,460	31.2	43,266	17.0	169.0
	Central RR Co. of New Jersey 1960	4,327	11,111	15,438	17.7	43,665	3,138	1,672	42.8	381	14.1	9,527	14.5	79.8
	1959	3,522	11,552	15,074	14.4	42,140	3,064	1,648	42.0	418	15.4	10,194	14.4	88.6
	Chicago & Eastern Ill. 1960	3,793	3,168	6,961	13.5	74,338	4,333	2,177	41.1	1,058	43.0	8,337	17.3	110.2
	1959	2,734	3,429	6,163	19.3	67,428	3,865	1,962	39.4	1,206	48.1	8,297	17.6	125.4
	Elgin, Joliet & Eastern 1960	7,718	6,114	13,832	5.7	21,893	3,013	1,624	46.6	188	6.9	13,448	7.5	52.9
	1959	8,219	8,452	16,671	4.3	22,301	3,094	1,665	44.9	218	7.9	17,842	7.5	72.4
	Pennsylvania System 1960	108,512	81,495	190,007	13.3	56,761	3,374	1,571	36.4	685	31.0	13,319	17.3	136.4
	1959	117,822	80,945	198,767	17.8	56,234	3,362	1,618	36.4	729	31.1	14,634	17.3	139.8
	Reading 1960	14,913	13,539	28,452	14.6	50,775	3,312	1,733	45.9	542	20.3	11,737	15.3	77.5
	1959	14,592	18,452	33,044	19.6	49,683	3,189	1,722	45.9	523	18.3	13,278	15.6	74.0
	Western Maryland 1960	7,685	2,980	10,665	7.5	56,484	4,023	2,284	51.4	951	29.5	11,943	14.3	126.4
	1959	6,247	3,380	9,627	5.1	58,380	3,923	2,247	50.6	1,151	35.2	12,897	15.2	162.4
Pocahontas Region	Chesapeake & Ohio 1960	64,719	29,666	94,385	5.6	76,448	4,263	2,249	48.5	918	33.8	17,213	18.0	67.9
	1959	57,357	33,967	91,324	6.5	79,464	4,372	2,459	50.1	1,056	37.1	18,697	18.3	67.6
	Norfolk & Western* 1960	52,478	8,299	60,777	1.6	91,493	5,312	2,812	54.3	1,103	37.5	24,494	17.6	159.1
	1959	48,054	9,786	57,840	1.6	91,600	5,292	2,949	54.6	1,251	39.9	25,821	17.7	110.9
	Rich., Fred. & Potomac 1960	161	943	1,104	2.6	101,854	4,512	1,782	27.3	1,902	113.7	21,403	22.6	94.5
	1959	103	961	1,064	3.8	90,073	4,044	1,635	26.2	1,895	108.2	18,850	22.3	90.7
Southern Region	Atlantic Coast Line 1960	19,391	15,892	35,283	4.4	48,355	2,829	1,271	34.8	805	40.6	5,117	17.1	194.5
	1959	16,086	19,187	35,273	3.3	46,945	2,778	1,264	35.1	745	36.6	4,879	16.9	194.1
	Central of Georgia 1960	3,961	4,925	8,886	4.3	53,401	3,029	1,468	37.9	978	41.7	5,030	17.7	194.1
	1959	3,243	6,610	9,853	2.7	51,296	2,945	1,440	37.4	975	40.4	5,334	17.5	197.4
	Florida East Coast 1960	636	2,965	3,601	.7	46,294	3,042	1,135	29.0	659	40.7	4,675	15.2	49.2
	1959	557	2,747	3,304	.5	43,538	2,470	916	30.1	721	44.7	4,739	17.6	60.4
	Gulf, Mobile & Ohio 1960	7,588	9,741	17,329	6.4	74,087	3,848	1,794	34.2	898	41.5	5,563	19.3	100.6
	1959	6,994	10,471	16,565	5.3	72,678	3,847	1,849	34.0	936	41.0	5,810	18.9	102.0
	Illinois Central 1960	27,498	22,295	49,793	2.4	61,431	3,300	1,496	34.1	942	46.5	7,204	18.7	144.1
	1959	24,670	23,396	48,066	4.5	59,899	3,267	1,533	34.4	1,062	49.2	7,715	18.5	96.2
	Louisville & Nashville 1960	36,236	16,920	53,156	11.6	55,687	3,061	1,498	39.3	854	36.5	8,092	18.3	202.1
	1959	33,100	17,062	50,162	8.2	53,444	3,099	1,553	38.8	872	36.3	7,930	17.3	195.8
	Seaboard Air Line 1960	17,433	13,076	30,509	3.4	56,794	3,216	1,439	35.8	918	45.5	6,769	18.0	189.8
	1959	16,785	12,874	29,659	3.3	56,048	3,027	1,374	35.4	892	42.5	6,445	18.8	170.1
	Southern 1960	21,062	29,564	50,626	3.7	55,596	3,233	1,319	29.6	722	39.5	5,882	17.2	152.4
	1959	18,414	29,026	47,440	4.4	58,160	3,263	1,537	32.8	896	42.2	6,808	17.8	155.1
Northwestern Region	Chicago & North Western 1960	22,557	25,744	48,301	8.9	48,609	2,969	1,209	30.8	671	36.5	3,596	16.4	149.9
	1959	21,172	25,892	47,064	5.5	53,795	2,886	1,364	34.1	756	41.0	4,362	18.7	181.5
	Chicago Great Western 1960	2,275	4,075	6,350	3.8	65,520	3,707	1,747	35.1	1,195	53.7	5,437	17.7	181.0
	1959	2,009	4,032	6,041	3.7	68,358	3,664	1,719	33.1	1,237	56.0	5,377	18.7	181.0
	Chic., Milw., St. P. & Pac. 1960	30,522	20,077	50,599	5.7	64,419	3,259	1,448	32.3	725	35.6	3,521	19.8	163.4
	1959	27,045	26,045	53,090	4.1	65,466	3,351	1,533	32.0	821	39.4	4,153	19.6	98.7
	Duluth, Missabe & Iron Range 1960	12,813	927	13,740	1.2	106,667	6,313	3,818	65.7	1,063	32.1	25,605	18.2	51.1
	1959	11,759	678	12,437	3.2	113,855	6,614	3,928	66.2	1,343	39.8	30,299	18.6	61.8
	Great Northern 1960	26,706	16,662	43,368	3.5	65,034	3,447	1,693	37.8	1,131	46.9	5,987	19.1	114.1
	1959	22,796	18,766	41,562	3.6	64,675	3,462	1,680	37.3	1,265	53.9	6,425	19.0	126.2
	Minn., St. P. & S. Ste. Marie 1960	7,425	5,803	13,228	9.8	52,176	2,643	1,230	32.5	1,027	48.9	3,270	19.8	123.7
	1959	6,673	6,935	13,608	5.2	51,747	2,640	1,235	32.4	1,101	51.4	3,566	19.8	134.1
	Northern Pacific 1960	19,896	13,176	33,072	3.1	61,718	2,903	1,329	31.3	922	43.6	4,830	21.3	100.6
	1959	17,440	14,911	32,351	3.6	62,801	3,029	1,375	31.7	1,066	51.3	5,440	20.8	114.6
	Spokane, Portland & Seattle 1960	1,592	4,035	5,627	5.2	40,091	2,852	1,363	31.6	1,071	45.8	6,512	14.1	199.2
	1959	1,275	3,788	5,063	3.7	39,476	2,584	1,210	27.8	1,116	54.2	6,096	15.3	98.0
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) 1960	53,364	37,530	90,894	5.2	77,756	3,163	1,237	28.6	1,256	69.4	8,756	24.6	144.0
	1959	53,664	44,570	98,234	3.6	72,130	3,093	1,173	27.7	1,220	70.9	8,901	23.4	180.0
	Chic., Burl. & Quincy 1960	27,390	20,077	47,467	5.2	64,178	2,938	1,291	30.7	898	45.5	4,891	21.9	184.9
	1959	22,063	19,654	41,717	3.6	62,971	2,938	1,300	30.8	1,054	52.8	5,199	21.5	168.4
	Chic., Rock I. & Pac. 1960	16,308	23,467	39,775	4.1	61,429	2,948	1,187	30.5	1,025	56.5	5,423	20.9	182.7
	1959	14,446	28,875	43,321	3.6	57,153	2,850	1,194	30.2	1,071	56.4	5,886	20.1	204.3
	Denver & R. G. Western 1960	8,799	5,865	14,664	5.9	73,079	3,453	1,673	33.6	1,003	40.2	6,962	21.2	115.4
	1959	8,496	5,688	14,184	5.9	67,169	3,268	1,599	34.5	1,132	45.3	7,407	20.6	124.7
	Southern Pacific 1960	31,699	37,265	68,964	2.2	74,149	3,309	1,320	28.5	1,415	79.6	12,521	22.6	117.3
	1959	32,154	48,275	80,429	2.5	68,253	3,355	1,376	28.8	1,319	70.7	13,287	20.6	127.3
	Union Pacific 1960	33,637	29,712	63,349	2.2	93,254	3,312	1,355	27.9	1,325	74.3	8,478	28.3	144.4
	1959	31,300	33,302	64,602	2.0	87,291	3,139	1,341	28.5	1,504	78.9	9,752	28.0	168.3
	Western Pacific 1960	2,594	2,554	5,148	3.5	74,758	2,673	1,178	29.3	2,068	102.9	8,674	28.1	190.3
	1959	2,585	2,928	5,513	2.9	72,543	2,615	1,115	28.3	1,815	95.5	8,719	28.0	236.6
Southwestern Region	Kansas City Southern 1960	2,380	5,298	7,678	4.7	97,417	4,804	2,244	34.8	1,081	46.9	9,428	20.3	188.7
	1959	2,331	5,859	8,190	4.6	99,322	4,978	2,344	36.0	1,232	52.7	11,065	20.1	222.3
	Louisiana & Arkansas 1960	1,888	3,335	5,223	5.9	78,712	3,956	1,858	38.4	886	37.9	6,236	19.9	175.2
	1959	1,954	3,398	5,352	6.4	69,905	3,627	1,758	37.5	944	37.9	6,572	19.3	174.7
	Mo.-Kans.-Texas Lines 1960	5,046	8,402	13,448	8.4	61,791	3,474	1,576	32.8	1,027	47.5	4,502	17.8	141.6
	1959	4,681	9,230	13,911	7.3	61,472	4,009	1,843	33.7	990	43.7	4,541	15.4	123.7
	Missouri Pacific 1960	24,521	23,996	48,517	6.5	67,047	3,238	1,486	33.2	1,212	57.1	5,984	20.8	189.5
	1959	22,740	28,050	50,790	7.4	66,368	3,346	1,525	32.7	1,187	56.6	6,325	19.9	180.2
	St. Louis-San Francisco 1960	11,562	11,685	23,247	2.0	53,778	2,754	1,309	33.2	1,147	51.7	5,759	19.6	183.3
	1959	10,802	11,020	21,822	1.9	55,032	2,787	1,347	33.1	1,172	51.2	5,876	19.9	197.8
	St. Louis Southw. Lines 1960	2,102	4,013	6,115	4.7	74,884	3,089	1,381	28.9	2,233	108.3	9,288	24.3	192.1
	1959	1,954	5,080	7,034	1.7	68,014	2,996	1,339	29.1	2,218	108.9	10,129	22.8	251.2
	Texas & New Orleans 1960	6,733	14,821	21,554	2.1	78,839	3,411	1,585	33.1	1,442	65.9	7,233	23.2	141.8
	1959	6,179	15,486	21,665	1.6	73,328	3,197	1,464	32.6	1,465	68.9	7,619	23.1	164.4
	Texas & Pacific 1960	3,290	5,147	8,437	5.6	83,194	3,564	1,343	28.4	1,388	79.3	6,712	23.5	251.0
	1959	2,808	6,048	8,856	3.6	79,703	3,441	1,326	28.5	1,414	79.6	7,058	23.2	268.5

* Includes operations of Virginian Ry. Co., merged into Norfolk & Western Ry. Co., December 1, 1959.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

New Products Report

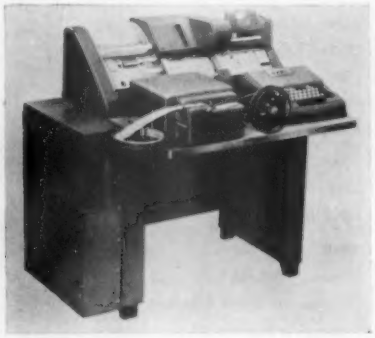


Electric Door Operators

The electric door operators for the 260 cars recently ordered by the New York Transit Authority for its BMT Division are compact and light in weight. Size has been reduced 51% under previous models and weight reduced by 40%, or 660 lb. Aluminum fabricated parts replace former iron castings. When installed under seats, operators leave ample space for adjustment and maintenance. *National Pneumatic Co., Dept. RA, 127 Amory St., Boston 19, Mass.*

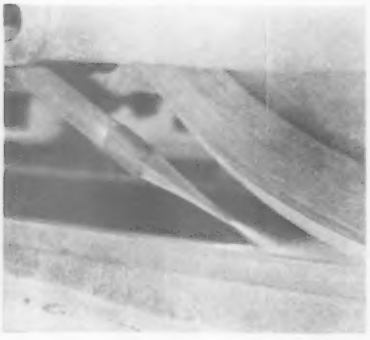
3-Way Document Writing

The IBM 870 can prepare simultaneously up to two typewritten documents, two punched cards and one punched 5-channel telegraphic paper tape. The information can be entered by keyboard, or tape or card reader. While the original document is prepared at the branch level, the same data is recorded on cards or tape for transmission to the data processing center. *International Business Machines Corp., Dept. RA, 112 East Post Road, White Plains, N. Y.*



Tape-to-Card Converter

The model C750 Universal Code Punched Tape to Card Converter processes all punched tape applications. Any 5- to 8-channel tape can be used as an input to punched card processing systems. It is designed for attachment to IBM 024 or 026 card punch, and includes parity checking. Plugboard wiring permits programming for different applications. Device consists of a tape reader and a control module. *Systematics, Dept. RA, Redondo Beach, Calif.*



Sand Valve Nozzle

A sand valve nozzle, of flexible rubber, is secured in place on locomotives with a simple pipe clamp. The nozzle always remains closed until the sand-control valve is opened. With the application of sand, the nozzle opens instantly and automatically. Being made of rubber, it is claimed it won't clog or freeze. The product is available in lengths of 50 ft, 1 in. in diameter. *Railroad Rubber Products Inc., Dept. RA, Ashtabula, Ohio.*

Plow Attachment

A new snow plow attachment for the Model F-10 industrial platform truck features a 50-inch blade with removable and reversible cutting edge. Moldboard curvature and angle are set to roll snow off to the side; lateral grooves in the board prevent snow from packing. According to the manufacturer, the device will work equally well in wet or dry snow. The blade can be raised for travel clearance. *Prime-Mover Co., Dept. RA, Muscatine, Iowa.*

Microwave Buildings

A factory-built metal building designed for microwave equipment may be installed in the field in a short time. The buildings are available in five sizes from 8 by 8 by 8 ft to 8 by 16 by 8 ft and may be delivered to the site by rail or truck. All wiring, equipment and insulation is installed prior to shipment. Attention has been given to proper ventilation, tightness and door seals. *Tower Construction Co., Dept. RA, 2701 Hawkeye Dr., Sioux City, Iowa.*

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MARKET OUTLOOK *at a glance*

Carloadings Rise 2.3% Above Previous Week's

Loadings of revenue freight in the week ended Oct. 8 totaled 646,016 cars, the Association of American Railroads announced on Oct. 13. This was an increase of 14,371 cars, or 2.3%, compared with the previous week; an increase of 88,440 cars, or 15.9%, compared with the corresponding week last year; and a decrease of 40,505 cars, or 5.9%, compared with the equivalent 1958 week.

Loadings of revenue freight for the week ended Oct. 1 totaled 631,645 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Oct. 1

District	1960	1959	1958
Eastern	91,584	86,668	98,069
Allegheny	105,505	85,582	114,597
Pocahontas	51,426	47,625	53,560
Southern	113,440	118,849	119,034
Northwestern	96,196	68,341	108,768
Central Western	120,645	114,340	131,867
Southwestern	52,849	50,947	51,730
Total Western Districts	269,690	233,628	292,365
Total All Roads	631,645	572,352	677,625
Commodities:			
Grain and grain products	61,496	50,388	60,752
Livestock	8,141	8,949	11,439
Coal	108,816	104,167	119,068
Coke	5,519	3,323	7,288
Forest Products	38,908	41,478	39,501
Ore	48,433	9,761	55,338
Merchandise l.c.l.	36,891	43,457	49,352
Miscellaneous	323,441	310,829	334,887
Oct. 1	631,645	572,352	677,625
Sept. 24	617,635	587,611	673,380
Sept. 17	598,716	577,457	667,760
Sept. 10	481,057	477,616	666,223
Sept. 3	577,090	547,806	563,725
Cumulative total, 39 weeks	23,278,671	23,418,064	22,371,418

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Oct. 1 totaled 12,224 cars, compared with 9,188 for the corresponding 1959 week. Loadings for 1960 up to Oct. 1 totaled 414,959 cars, compared with 308,989 for the corresponding period of 1959.

IN CANADA.—Carloadings for the nine-day period ended Sept. 30 were not available when this issue of Railway Age went to press.

New Equipment

FREIGHT-TRAIN CARS

► *Atlanta & West Point.*—Ordered 30 50-ft 50-ton box cars from Pullman-Standard for November delivery. Ten will be equipped with special loading devices.

► *Seaboard Air Line.*—Has ordered 25 90-ton flat cars, specially designed for the all-weather transportation of coiled tinplate, from Thrall Car. Each of the 53-ft roller-bearing cars will carry eight 20,000-lb coils of tinplate under a specially designed steel cover. Delivery will begin in November. Total cost: $387,000.

► *Union Pacific.*—Ordered 50 70-ton, 2,600-cu ft, Airslide covered hoppers from General American. Scheduled for delivery in January 1961, the cars will be equipped with roller bearings and be used for loading bulk food commodities.

► *Western Railway of Alabama.*—Ordered 20 50-ft 50-ton box cars from Pullman-Standard for November delivery. Ten will be equipped with special loading devices.

► *August Bad Order Ratio 0.5% Higher Than Last Year.*—Class I roads on August 1 owned 1,672,421 freight cars, 28,496 less than a year ago, according to AAR report summarized below. Bad Order ratio was 0.5% higher than on Aug. 1, 1959.

	Aug. 1, 1960	Aug. 1, 1959	Change
Car Ownership	1,672,421	1,700,917	−28,496
Waiting repairs	143,579	138,440	+5,139
Repair ratio	8.6%	8.1%	+0.5%

FOREIGN

► *Chilean State Railways.*—Will spend $250,000,000 for rehabilitation and expansion. Program includes purchase of rolling stock, 113 diesel locomotives, electric block and telecommunication signal system, and electrification and general maintenance equipment.

► *India.*—Indian Railways are taking bids for supply of 20,633 completely assembled broad-gage wheelsets for 16-ton axle load and plain bearings; 1,994 completely assembled broad-gage wheelsets for 16-ton axle load and roller bearings; 2,027 completely assembled meter-gage wheelsets for 12-ton axle load and plain bearings; 400 completely assembled narrow-gage wheelsets for 8-ton axle load and plain bearings. Drawings and specifications from India Supply Mission, 2536 Massachusetts Avenue, N. W., Washington, D. C. Bids by Oct. 31 to Director, Railway Stores, Ministry of Railways, State Entry Road, New Delhi.

New Facilities

► *Seaboard Air Line.*—Plans to build a new freight station in Charlotte, N. C., with construction to begin in November and be completed by May 1961. Bids for the 132-ft-by-40-ft concrete and brick structure will be opened Oct. 26 at SAL general offices in Richmond.

a RAILWAY AGE time-saver page

Court Won't Halt Merger

► **The Story at a Glance: Judge Thornton of the Federal District Court at Detroit indicated last week that he would not enjoin consummation of the Erie-Lackawanna merger, but he would issue a temporary restraining order to prevent the consolidated company from changing the status of employees.**

This disposition of labor's complaint was determined upon by the judge after a hearing on Oct. 12. The effect will be to enjoin carrying out only the labor-protection conditions imposed by the ICC in its favorable report on the merger which is scheduled to become effective this week.

Judge Thornton did not follow through immediately to issue his restraining order. He expected to issue it Oct. 14 after representatives of the railroads and labor had submitted stipulations which would become its basis.

The judge also indicated that he would work for an expedited hearing of the case on its merits. He thought the special three-judge court required for that purpose could be convened by Nov. 15, and he hopes for an early decision—perhaps within a week or so after that date.

While the court test is a project of the Railway Labor Executives' Association, as announced by RLEA Chairman G. E. Leighty, the suit was filed only on behalf of the Brotherhood of Maintenance of Way Employees in the federal district court at Detroit, Mich. The brotherhood headquarters are in Detroit.

The suit is a complaint against the ICC and the United States Government. It asks the court to "suspend, enjoin, annul and set aside" the Commission's order approving the merger. It was based on a contention that labor protection provisions of the Interstate Commerce Act require a job freeze, and that the Commission violated those provisions when it left Erie-Lackawanna with the alternative of giving severance pay to employees affected (RA, Oct. 10, p. 9).

The labor-protection provisions are in the act's section 5(2) (f). They require the Commission to condition its approval of mergers so that they will not result in affected employees being "in a worse position with respect to their employment" for post-merger periods up to maximum of four years. This maximum applies to employees who have been in service at least four years, the provisions applicable to employees with less service being that their periods of protection shall not be greater than the periods of their service prior to the merger.

The complaint asked first for a temporary restraining order to prevent consummation of the merger until the court passed upon an accompanying plea for an injunction. The latter was sought to freeze the status quo until a special three-judge court decided the case on its merits, i.e., interpreted the employee-protection law.

The ICC's answer was that the plea for a stay should be denied because early consummation of the merger was "urgent" and should not be delayed on the strength of speculative allegations of damages to employees who are protected by comprehensive and liberal conditions of the labor unions.

Meanwhile, the brotherhood's pleading had argued that, if the merger were allowed to proceed, the affected employees would be "irreparaby injured." In developing that point, the complaint also said:

"The Commission, the railroads and the courts would be powerless to turn back the clock, reverse the bumping process, recreate jobs which have been abolished, relocate employees who have been transferred and reemploy employees who have been deprived of their employment. Unscrambling the unemployment problem in the event of a determination setting aside the Commission order in this case would be a practical impossibility."

Much of the Commission's answer is devoted to an explanation of the labor-protection conditions imposed by the merger decision. They are the so-called standard conditions usually imposed in merger cases, and labor unions have heretofore accepted them without protest.

The Commission's statement to the court also contained much argument and many citations in support of the proposition that issuance of a restraining order would be "drastic" action, "particularly in view of the public interest to be served by early consummation of the merger." Thus, the Commission added it should be withheld "in the absence of a compelling reason for its issuance."

Later on, the answer called the merger "one of major importance," because it will afford "two large railroads that have been experiencing financial difficulties" a "reasonable prospect of achieving financial stability." The Commission added:

"The overriding consideration here is the public interest in a healthy, economical transportation system. . . This merger has been found to be in the public interest. Its consummation is urgent and should not be delayed."

The ICC's associate general counsel, Franklin B. Taylor, represented the Commission and the federal government at the Oct. 12 hearing. The brotherhood was represented by William G. Mahoney, of Mulholland, Robie & Hickey.

Report Hits C&EI's Application for Merger

C&EI has until Nov. 3, to file exceptions to an ICC examiner's recommended report denying its application to assume ownership, management and operation of the Chicago Heights Terminal Transfer Railroad Co. Merger of the wholly owned subsidiary of C&EI into the parent company was opposed by EJ&E and the Milwaukee. They claimed the merger would adversely affect their line haul traffic.

Examiner J. L. Bradford's recommended report stated that C&EI's claim of substantial annual savings stemming from the unification could not be ascertained from the record. He noted, however, that "adverse effect of the merger upon the protestants' traffic is clear and definite."

Both Milwaukee and EJ&E compete with C&EI for line haul traffic originating on Terminal lines. Previously, C&EI's acquisition of Terminal stock was conditioned upon maintaining existing traffic and operating relationships between Terminal and all of its connections.

Current Publications

SYMPOSIUM ON SPECTROSCOPY. Representative papers in six distinct fields of spectroscopy. Bibliographies. 246 pages. ASTM Headquarters, 1916 Race St., Philadelphia 3, Pa., $7.00.

DIRECTORY, WORLD-WIDE SALES, SERVICE AND PARTS OUTLETS. 600 listings in Canada, United States, Mexico and overseas. Directory 8SA48, General Motors Diesel Limited, London, Ontario. Free.

GM DIESEL GENERATOR SETS FOR STAND-BY AND CONTINUOUS OFF THE LINE POWER. 8 pages. Illustrated. Technical data and warranty information. Form 8SA68. Advertising Department, General Motors Diesel Limited, London, Ontario. Free.

ULTRASONIC WELDING, 38 pages, 299 illustrations. American Welding Society, 33 West 39th Street, New York 18. $1.50.

Healy Cites RUIA Gains, Warns of Inequities

Four years of closer Railroad Retirement Board-carrier relations have brought a new degree of control to the unemployment insurance system, RRB Member Tom Healy indicated recently in remarks before the AAR Treasury Division and American Short Line Railroad Association annual meetings. Among the accomplishments of the program:

- Employment, largely permanent, has been found for more than 140,000 furloughed railroad workers. Gains have come principally through cooperative actions in waiving and extension of seniority rights or districts; transfers from one occupational group to another on the same railroad; and transfers to other railroads or outside industries in the same or different occupations.
- Better policing or claims for unemployment and sickness benefits cut payments under the retroactive provisions of the 1959 amendments to the Act. Total payments, Mr. Healy said, "were around $90 million, or $20 million less than the original calculated cost." Savings were primarily due to control activities which resulted in disallowance of more than 1.7 million benefit days claimed under the retroactive and extended benefit periods.
- "Through regular placement and policing operations, another $20 million was saved or recaptured for the . . . account in the last fiscal year."

Gains made in these areas, however, haven't softened Mr. Healy's stand on the inequitable provisions of the Act. He makes these points:

- Overall, inequities "are costing the industry around $86 million per year. . . . There is a moral need for the removal of those inequities and the effort should be continued."
- Rail strikes this year—including work stoppages on the PRR, Grand Trunk, Long Island, Union and other steel roads—resulted in payment of unemployment benefits in excess of $10 million "to railroad employees involved in strikes against the industry and at the sole expense of the industry. . . . What reasoning, legal, moral or, indeed, spiritual, can ever justify the compulsory financing by employers of a work stoppage by its employees—in a single industry?"
- The "dual or triple dip" is not uncommon. During the last fiscal year, a check showed that "14,000 persons drew $9 million in sickness benefits although they were immediately entitled to, or [were] actually receiving, annuities under the Railroad Retirement Act."

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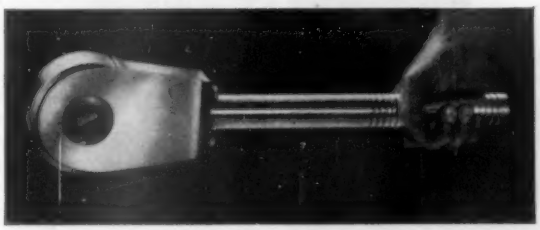

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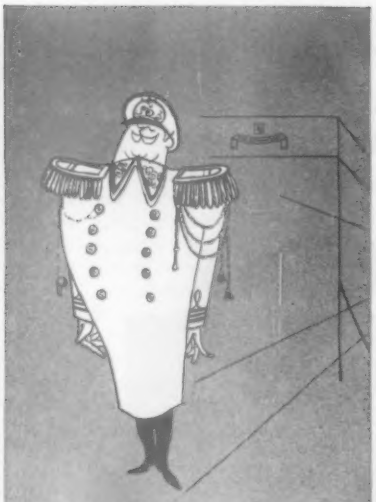

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Robert Sarason, *General Manager*

RAIL TRANSIT: WHAT'S AHEAD?

(Continued from page 20)

buy, and substantially lighter, and you will have the problem half licked. Then design cars which require fewer trucks, wheels and axles. The next step is to design the system so as to be completely operable with a minimum of staff. If this efficiency isn't designed into the system, it can never be realized. By reducing manpower requirements, rail transit becomes much more economic in the rush hour periods. The ideal car would have cab-controlled automatic doors and couplers, and would be arranged so as to be fully efficient when operated by a single man—even in commutation service. It would have lower floors and a lower roof line, because these reduce the cost of constructing stations and the cost of any tunnelling or overbridging which may be required. With a low enough floor, a rapid transit car could work efficiently from a minimal platform near street level. There are many other things, such as creating non-electric rail transit cars for lines without sufficient traffic potential to justify electrification.

Q. How important is weight in this concept?

A. I would say that weight makes more difference in transit design than in any other part of the railroad industry. Speed is an essential sales point in rail transit, and to get speed you need rapid acceleration and deceleration. The cost of this added speed is directly related to the weight of the car; a heavy car takes more power to start and requires more braking energy to stop. In freight car design, the savings from lighter weight are not vital. But in transit, exactly opposite is the case. Higher speeds are economic only with lighter weight cars. Among other things, higher speeds reduce the number of cars and crews needed to sustain a given peak hour operation.

Q. It seems to me that most of your comments have been directed toward urban transit. What about suburban transit?

A. Suburban transit is a large field, and one with great potential. Everything I said applies with equal force and validity to suburban rail transit services. Just as there are few cities that can support the heavy-duty kind of rail transit that is commonly offered today, there are few that can support expensive heavy-duty rail suburban services. But there are many places where a light-duty suburban rail service would be most useful and economic—if such a thing were readily available.

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Paul W. Johnston, Jr.
Erie

People in the News

ATLANTIC COAST LINE.—**W.T. Bullard,** trainmaster, Richmond, Va., appointed superintendent terminals, Tampa, Fla., with jurisdiction over train and yard operations at Tampa, Port Tampa and East Tampa.

BALTIMORE & ANNAPOLIS.—**Bruce P. Wilson,** president of the Baltimore & Annapolis, Baltimore, Md., has been named a regional vice president of the Carling Brewing Co. and general manager of its new $16 million plant now being constructed just outside Baltimore. Mr. Wilson will continue as a member of the board of the railroad.

BURLINGTON.—**G. A. Miller,** chief clerk of the divisions department, appointed general freight agent (divisions), Chicago, to replace **J. T. Baldwin,** retired. **G. B. Beckman,** special divisions clerk, named assistant general freight agent (divisions).

CANADIAN NATIONAL.—**William H. Neale,** assistant Australian traffic manager, at Sydney, appointed assistant to manager, foreign freight sales, Montreal, Que.

CANADIAN PACIFIC.—**H. A. Greeniaus,** assistant vice president, Montreal, retired Sept. 30. **J. V. Forrest,** assistant to vice president, will assume Mr. Greeniaus's senior administrative duties. **J. C. Ames,** who has been engaged in special duties, returned to his former position of assistant to vice president on Oct. 1.

A. L. McGregor, manager of labor relations, Montreal, appointed assistant vice president—personnel.

Carlton Baron, chief of the freight tariff and division bureaus, Winnipeg, Man., appointed general freight agent, rates and divisions, Pacific region, Vancouver, B.C. **Joseph P. McEwan,** assistant general freight agent, rates and divisions, named general freight agent, rates and divisions, Prairie region, Winnipeg.

G. W. Miller, assistant general manager, special duties, Toronto, Ont., appointed assistant general manager, Eastern region, succeeding **W. F. Koehn,** who has retired because of ill health.

J. L. Lepage, superintendent of investigation, Prairie region, Winnipeg, Man., transferred to the Atlantic region, Montreal, Que., succeeding **L. J. F. Duberges,** retired.

CHICAGO SOUTH SHORE & SOUTH BEND.—**D. E. Ferner** elected president; **Jay Samuel Hartt,** chairman of the board, and **W. P. Coliton,** vice president and general manager (RA, Oct. 3, p. 36).

DETROIT, TOLEDO & IRONTON.—**William Rowe** appointed to the newly created position of assistant to the general freight agent, Dearborn, Mich.

ELGIN, JOLIET & EASTERN.—**John L. Manthey** appointed auditor of capital expenditures, Joliet, Ill., succeeding **Joseph L. Backer,** retired.

Joseph V. McGovern, chief special agent, retired Sept. 30, and his former position abolished. **D. L. Winfield** named superintendent of employment and police, Joliet.

ERIE.—**Paul W. Johnston, Jr.,** assistant freight traffic manager, appointed freight traffic manager of piggyback and less than carload merchandise traffic, New York, succeeding **Bernard F. Conway,** who retired Sept. 30.

ILLINOIS TERMINAL.— **J. P. Donahue** appointed to the newly created position of supervisor of safety, St. Louis.

MILWAUKEE.—**George K. Ubl,** assistant general accountant, Chicago, appointed general accountant there, to succeed **William E. Ross,** named assistant comptroller.

Lyle R. Whitehead, freight traffic manager, sales and service, Chicago, appointed freight traffic manager, rates and divisions there.

MONON.—**Frank E. Redmon** appointed general agent, Winston-Salem, N.C., succeeding the late **S.L. Budd. Joseph A. Martin** named general agent, Atlanta, Ga., succeeding **J.A. Davidson,** resigned.

ROCK ISLAND.—**James Hope,** engineer of work equipment, Chicago, retired. **Delbert C. Gerstenberger,** fleet manager, Chicago, appointed general supervisor of work equipment, and **Kenneth J. De Camp,** assistant supervisor of work equipment named assistant general supervisor of work equipment.

UNION PACIFIC.— **Gerald E. Jensen,** chief clerk, freight accounting department, appointed auditor of equipment service accounts, Omaha, Neb., succeeding **L. R. Hilker,** retired.

Dale R. Hampton appointed assistant freight traffic manager, Omaha.

Supply Trade

R. H. Bish, works manager, **Electro Motive Division** of **General Motors,** La Grange, Ill., has been transferred to a new assignment in the **General Motors Technical Center,** Detroit. **George D. Baker,** assistant works manager, EMD, has been named manufacturing manager. **John H. Anderson,** director of test and inspection, appointed manager of manufacturing facilities. **Robert A. Stoddart,** manager, branch operations, has exchanged positions with **W. N. Fritts,** manager, production control. **H. D. Dana,** assistant director of test and inspection, has been appointed manager, quality control.

David Greene, vice president and treasurer, **Magor Car Corp.,** New York, retired Sept. 30, after 30 years of service.

Robert M. Clementson has been named manager, Cleveland district, **L. B. Foster Co.,** succeeding **Andrew M. Filak,** who has been promoted to manager of product research and development. Mr. Clementson was formerly district sales manager for the construction products division of a major steel company. **Kenneth M. Schneider** has joined Foster's Detroit office.

R. Stanley, E. G. Giles and **R. Segrest** have been appointed representatives of L. B. Foster Co. at its new office and steel warehousing plant in Lubbock, Tex.

Lucien Williams, a salesman for **National Malleable & Steel Castings Co.** since 1955, has assumed the managership of the St. Louis office, succeeding **Howard Stark,** retired. **Glenn G. Tenney,** who joined the company in 1950, has been named manager of the Philadelphia office, succeeding **Russell J. Wittmer,** retired.

Dr. James C. Settles has been appointed chief mechanical engineer of the **Buckeye Steel Castings Co.,** Columbus, Ohio. **Harry A. Moeller** has been named engineering assistant to the president, assigned to special duties.

American Hoist & Derrick Co., St. Paul has appointed Andrews Agency Inc. of Milwaukee, to handle the company's advertising, effective Nov. 30.

Dividends Declared

ATCHISON, TOPEKA & SANTA FE.—30¢, quarterly, payable Dec. 8 to holders of record Oct. 28.

CHICAGO, ROCK ISLAND & PACIFIC.—40¢, paid Sept. 30 to holders of record Sept. 23.

CLEVELAND, CINCINNATI, CHICAGO & ST. LOUIS.—5% preferred, $1.25, quarterly, payable Oct. 31 to holders of record Oct. 21.

DAYTON & MICHIGAN.—8% preferred, $1, quarterly, payable Jan. 3, 1961, to holders of record Dec. 15.

DELAWARE.—$1, semiannual, payable Jan. 2, 1961 to holders of record Dec. 15.

ELMIRA & WILLIAMSPORT.—preferred, $1.62, semiannual, payable Jan. 3, 1961, to holders of record Dec. 20.

KALAMAZOO, ALLEGAN & GRAND RAPIDS.—$2, semiannual, paid Oct. 1 to holders of record Sept. 15.

You Ought To Know ..

A $150-million bond issue is being considered by the Southern to provide funds for purchasing various railroad properties. The first purchase would be the Central of Georgia. Control of the Louisville & Nashville, as represented by the 33.7% stock interest in the L&N held by Atlantic Coast Line, would also be purchased. The Southern's stockholders will meet Nov. 21 to consider issuance of the bonds.

H. S. Dewhurst, executive assistant, AAR, told the American Railway Magazine Editors' Association last week that company publications can "beat rumor to the punch with truth." Presenting remarks scheduled to be delivered by J. Handly Wright, Vice President AAR, Mr. Dewhurst added that, "management has the right and duty to talk over company matters with employees."

Oscar-of-Industry trophy winners, and runners-up, have been announced by Financial World, giver of the awards for best annual stockholder reports. For railroads with revenue over $200 million, first, second and third places were won by PRR, GN, and MoPac. For roads in the $60-$200 million category, the line-up is D&RGW, GM&O, and SAL. For revenue under $60 million, it is WP, BAR, and CofGa. The C&O took an Oscar for the best security analyst yearbook in the transportation category, Southern for the best post meeting report, and NP for the best annual report advertisement.

The ICC has approved Illinois Central control of the Peabody Short Line, 10 miles, through ownership of its capital stock. IC acquisition and operation of the adjoining Peabody Spur Track, 11 miles, owned by the Peabody Coal Co., has also been authorized.

Early consummation of the sale of the Minneapolis & St. Louis to Chicago & North Western is anticipated by M&StL officers. At least ten top officers have already departed or have definite plans (six of them are going to other railroads). C&NW is taking on three M&StL executives—in the engineering, mechanical and personnel departments—but indications are that North Western's principal pick-up of M&StL people will be in the traffic department (RA, Aug. 22, p. 14).

A hearing examiner adjourned until Nov. 15 proceedings in North Western's request that the Illinois Commerce Commission determine that firemen are not needed on push-pull commuter trains. Meanwhile, a brotherhood claim that the state commission has no jurisdiction to rule on the application was argued before the five-man commission last week.

International shipments can now move via a coordinated air cargo-surface express service, following the signing of a new interline agreement between Trans World Airlines and Railway Express Agency. The pact links shippers and receivers at some 20,000 off-airline points served by express in the U.S. and those served by TWA in 23 major world markets.

Thirty ultrasonic flaw detectors are on their way to Argentine National Railways in Buenos Aires. The $142,000 shipment of ultrasonic testing equipment from Branson Instruments in Stamford, Conn., is reported to be the largest ever sent out of the country to a single customer. The Sonoray detectors will be used to inspect freight car axles and other equipment for metal fatigue and other flaws.

'Plan VII' Next?

Latest thing in piggyback, according to some tongue-in-cheek talk around last week's annual meeting of the National Association of Shippers' Advisory Boards at Minneapolis, is Plan VII.

That's where a shipper owns his own trailers, his own cars—and his own railroad.

AAR Vice President Walter J. Little died Oct. 11 in Los Angeles, Calif. He underwent heart surgery several weeks ago. Mr. Little was 66 years old. He had been associated with the AAR as vice president in charge of legislative activities since 1957. He was also a former general counsel of the California Railroad Association, and he served from 1926 to 1934 as a member of California's general assembly.

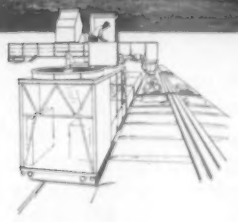
Annual grants of $750 to winners of its 1961 scholarship competition will be awarded by GN. Applications close Feb. 15 for eligible dependents of employees with 10 years or more service.

New 33-track westbound retarder classification yard at Cumberland, Md., has been put in service by the B&O. In addition to automatic switching and retarder controls, the yard has an extensive communications system consisting of talk-back and paging speakers, walkie-talkies, and two-way radios on yard engines.

Discontinuance of SP's intra-state trains Nos. 77 and 78, operating between San Francisco and Pacific Grove, has been requested of the California PUC.

"Preparation of specifications for the best possible modern car for the commuting public" has been completed by railroads and the Port of New York Authority, Port Authority Executive Director A. J. Tobin told New York's Regional Plan Association. PA is the agency named by New York State's 1959 commuter aid program to buy and lease new cars to New York's commuter railroads (RA, March 23, 1959, p. 9).

A transportation industry roundtable will be held at the 29th annual conference of the Controllers Institute of America in San Francisco, Oct. 23-26. Leo J. Gosney, vice president and comptroller, SP, will discuss "Financial Planning and Control in the Transportation Industry." Roundtable will be conducted by Roger F. Brown, C&O's director of planning; vice chairman will be R. A. Sauer, vice president and controller, REA.



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How're You Voting?

If the political opinions of railroad leaders are in harmony with their loyalty toward free enterprise principles—as evidenced by the policies they follow in managing the railroads—then they have found little to applaud in the programs of either of the major political parties. Or of the Presidential candidates.

Railroad managements have set themselves apart from most other business by their austere adherence to both the letter and spirit of self-reliance, and in their abstention from seeking or accepting handouts from government to foster their prosperity. (Even the few railroad executives who have sought public help to cover deficits from commuter service are no exception to this observation—because they would gladly abandon this red-ink service, if permitted.)

What a contrast between this position of the railroads, and that of practically all other large business! The electric utilities—persistent in their condemnation of government's competition *with them*—are enthusiastic patrons of the toll-free waterways for the movement of their fuel. Most other heavy industries share the utilities' zest for subsidized waterway transportation. Major manufacturers have welcomed government financing of plant facilities for producing military goods. The gigantic aviation manufacturing industry is, practically, the creation of the federal government. The roadbuilding and automotive industries look to huge annual highway appropriations to keep them prosperous.

•

This paper shares the faith of railroad managers in the rectitude of the principles of self-reliant private enterprise—and, hence, in the ultimate triumph of these principles. There is a practical problem, though, and that is—how do you keep alive and strong while waiting for evil and error to be overcome? There are a number of wise counselors on such questions—one of them the Foundation for Economic Education of Irvington, N.Y. In one of its recent publications we note the following:

"Each of us has only the choice of living in today's market—in society as it is—or quitting life entirely. We cannot live and at the same time escape some degree of participation in socialism, so all-pervasive is its acceptance and practice.

"If one lives in Los Angeles or Tacoma or Chattanooga or in any one of 1,872 other cities and towns, he will either use socialized power and light or do without a dependable, low rate source of power and light.

"We use socialized mail delivery, eat bread made of subsidized wheat, drink government controlled milk, ride on subsidized airplanes, ships, and buses; indeed, our medium of exchange, used daily, is diluted by reason of socialism's costs.

"Living in total freedom from socialism is not humanly possible today. Every one of us is, to some degree, in on the evils we deplore. But the mind is free and thus we can refuse to sanction the malpractices which engulf us."

The Foundation goes on to suggest that the citizen who understands the validity of economic and political freedom can, at least, refrain from advocating or promoting any departure from it. And he can, at least, endeavor at all times to explain his philosophy to anybody who will listen. Candidates for office, incidentally, are usually good listeners. And one of the reasons so many of them lean to the left is that leftists usually are politically more active and vocal than people who know better.

When it comes to voting—whether the office be President, or Congressman, or local political office—of two candidates, one can always be found who is less deeply committed to big government than the other. So there is a choice in every instance.

•

Most of the leadership for reform in federal transportation policy—to enable railroads to live and prosper as free enterprise—must be looked for from the initiative of individual senators and congressmen. And these men are always attentive to the opinions of their substantial and influential constituents. It is the opinions of such constituents on specific questions—rather than abstract theories about free enterprise or socialism—that determine the action of most legislators.

Just because not all candidates for office are such died-in-the wool opponents of big government as, for instance, Senators Byrd or Goldwater, is no reason to assume that they would not vote for sound transportation policies, if they have a hard core of influential constituents who want them to vote that way. Railroad management people have not been disfranchised. They can support vocally and substantially those candidates most likely to oppose socialization of transportation—and effort in behalf of such candidates will not be wasted.

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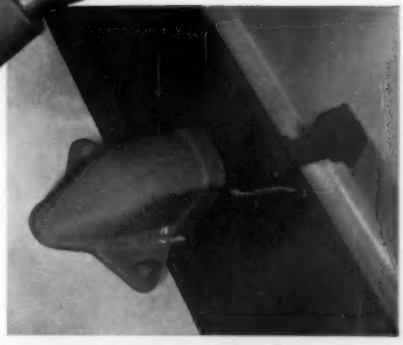

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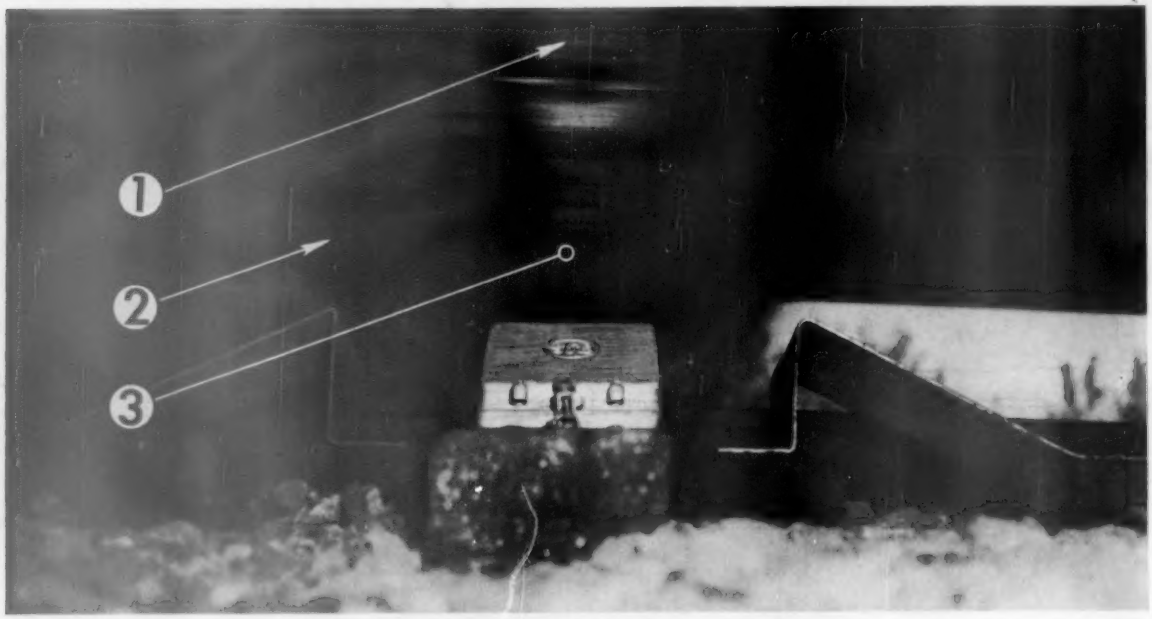

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